

MONETARY POLICY AND THE STATE OF THE ECONOMY

HEARING BEFORE THE COMMITTEE ON FINANCIAL SERVICES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED THIRTEENTH CONGRESS SECOND SESSION

JULY 16, 2014

Printed for the use of the Committee on Financial Services

Serial No. 113-92



U.S. GOVERNMENT PUBLISHING OFFICE

91-156 PDF

WASHINGTON : 2015

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

HOUSE COMMITTEE ON FINANCIAL SERVICES

JEB HENSARLING, Texas, *Chairman*

GARY G. MILLER, California, <i>Vice Chairman</i>	MAXINE WATERS, California, <i>Ranking Member</i>
SPENCER BACHUS, Alabama, <i>Chairman Emeritus</i>	CAROLYN B. MALONEY, New York
PETER T. KING, New York	NYDIA M. VELÁZQUEZ, New York
EDWARD R. ROYCE, California	BRAD SHERMAN, California
FRANK D. LUCAS, Oklahoma	GREGORY W. MEEKS, New York
SHELLEY MOORE CAPITO, West Virginia	MICHAEL E. CAPUANO, Massachusetts
SCOTT GARRETT, New Jersey	RUBEN HINOJOSA, Texas
RANDY NEUGEBAUER, Texas	WM. LACY CLAY, Missouri
PATRICK T. McHENRY, North Carolina	CAROLYN MCCARTHY, New York
JOHN CAMPBELL, California	STEPHEN F. LYNCH, Massachusetts
MICHELE BACHMANN, Minnesota	DAVID SCOTT, Georgia
KEVIN MCCARTHY, California	AL GREEN, Texas
STEVAN PEARCE, New Mexico	EMANUEL CLEAVER, Missouri
BILL POSEY, Florida	GWEN MOORE, Wisconsin
MICHAEL G. FITZPATRICK, Pennsylvania	KEITH ELLISON, Minnesota
LYNN A. WESTMORELAND, Georgia	ED PERLMUTTER, Colorado
BLAINE LUETKEMEYER, Missouri	JAMES A. HIMES, Connecticut
BILL HUIZENGA, Michigan	GARY C. PETERS, Michigan
SEAN P. DUFFY, Wisconsin	JOHN C. CARNEY, Jr., Delaware
ROBERT HURT, Virginia	TERRI A. SEWELL, Alabama
STEVE STIVERS, Ohio	BILL FOSTER, Illinois
STEPHEN LEE FINCHER, Tennessee	DANIEL T. KILDEE, Michigan
MARLIN A. STUTZMAN, Indiana	PATRICK MURPHY, Florida
MICK MULVANEY, South Carolina	JOHN K. DELANEY, Maryland
RANDY HULTGREN, Illinois	KYRSTEN SINEMA, Arizona
DENNIS A. ROSS, Florida	JOYCE BEATTY, Ohio
ROBERT PITTENGER, North Carolina	DENNY HECK, Washington
ANN WAGNER, Missouri	STEVEN HORSFORD, Nevada
ANDY BARR, Kentucky	
TOM COTTON, Arkansas	
KEITH J. ROTHFUS, Pennsylvania	
LUKE MESSER, Indiana	

SHANNON MCGAHN, *Staff Director*

JAMES H. CLINGER, *Chief Counsel*

CONTENTS

	Page
Hearing held on:	
July 16, 2014	1
Appendix:	
July 16, 2014	53

WITNESSES

WEDNESDAY, JULY 16, 2014

Yellen, Hon. Janet L., Chair, Board of Governors of the Federal Reserve System	7
--	---

APPENDIX

Prepared statements:	
Yellen, Hon. Janet L.	54

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Duffy, Hon. Sean:	
Letter to President Barack Obama, dated June 18, 2014	60
Lynch, Hon. Stephen:	
Letter from Americans for Financial Reform, dated July 10, 2014	66
Yellen, Hon. Janet L.:	
Monetary Policy Report of the Board of Governors of the Federal Reserve System to the Congress, dated July 15, 2014	76
Written responses to questions submitted by Representative McHenry	134
Written responses to questions submitted by Representative Neugebauer	136
Written responses to questions submitted by Representative Luetkemeyer	141
Written responses to questions submitted by Representative Ross	144
Written responses to questions submitted by Representative Stutzman	146
Written responses to questions submitted by Representative Miller	149

MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, July 16, 2014

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 10:03 a.m., in room 2128, Rayburn House Office Building, Hon. Jeb Hensarling [chairman of the committee] presiding.

Members present: Representatives Hensarling, Bachus, Royce, Garrett, Neugebauer, McHenry, Bachmann, Pearce, Posey, Fitzpatrick, Westmoreland, Luetkemeyer, Huizenga, Duffy, Hurt, Stivers, Fincher, Stutzman, Mulvaney, Hultgren, Ross, Pittenger, Barr, Cotton, Rothfus, Messer; Waters, Maloney, Velazquez, Sherman, Meeks, Lynch, Scott, Green, Cleaver, Ellison, Perlmutter, Himes, Carney, Sewell, Foster, Kildee, Delaney, Sinema, Beatty, Heck, and Horsford.

Chairman HENSARLING. The committee will come to order. Without objection, the Chair is authorized to declare a recess of the committee at any time.

This hearing is for the purpose of receiving the semi-annual testimony of the Chair of the Board of Governors of the Federal Reserve System on monetary policy and the state of the economy.

I now recognize myself for 5 minutes to give an opening statement.

We welcome Chair Yellen for another semi-annual Humphrey-Hawkins appearance before our committee today. Her appearance performs a double duty, as today's hearing represents the 11th hearing of our committee's Federal Reserve Centennial Oversight Project.

As all Members know, last week we held a legislative hearing on the first piece of legislation to arise from the Project, namely the Federal Reserve Accountability and Transparency Act (FRAT Act), co-authored by Mr. Huizenga and Mr. Garrett.

Not surprisingly, its introduction was met with howling protests and apocalyptic visions from my Democratic colleagues. Regrettably, such a reaction has become commonplace on our committee. With few exceptions, my Democratic colleagues have proven they do not wish to legislate, nor do they wish to conduct oversight.

It causes many to wonder why they ran for Congress in the first place. And the answer: they apparently wish to be defenders and apologists of the status quo.

But with the real unemployment rate at 12.1 percent, 46 million Americans dependent on food stamps, and real median income hav-

ing fallen every year of the Obama Administration, the status quo is unacceptable.

Additionally, when the Federal Reserve helps precipitate the financial crisis with loose monetary policy, selectively intervenes in distinct credit markets, facilitates our unsustainable national debt, blurs the lines between fiscal and monetary policy, and has its power vastly expanded, the status quo is unacceptable.

A dramatic increase in power calls for a corresponding increase in accountability and transparency, and that is precisely what the FRAT Act does. The overwhelming weight of evidence is that monetary policy is at its best in maintaining stable prices and maximum employment when it follows a clear, predictable monetary policy rule.

I believe the period of the great moderation between 1987 and 2002 attests to this proposition. Had a clear, predictable monetary policy rule like the Taylor Rule been in place throughout the last decade, it is likely the financial crisis would have been avoided in the first place, or at least downgraded to a garden variety recession.

The FRAT Act in no way, shape, or form dictates monetary policy. Anybody who maintains otherwise either hasn't read the Act, doesn't understand the Act, or regrettably, they are trying to mislead others.

After the passage of the FRAT Act, if the Fed wants to conduct monetary policy based upon viewer text messages from the "American Idol" television show, it will retain the unfettered discretion to do so. If the Fed wishes to conduct monetary policy based upon a rousing game of rock-paper-scissors on odd Tuesdays at the Federal Open Market Committee (FOMC), it will retain the unfettered discretion to do so.

The Fed can set any rule it wishes. It can change the rule anytime it wishes. It can deviate from the rule any time it wishes.

Under the FRAT Act, it simply has to report and explain this to the rest of us. That is what transparency and accountability are all about.

For those who claim this somehow imposes upon the Fed's independence, I note that the Fed Chair testifies before our committee and our Senate counterpart twice a year. The Fed Chair meets with the Treasury Secretary once a week. And dare I mention the continuing revolving door between Fed officials and Treasury officials.

The threat to the Fed's independence does not come from the Legislative Branch; it comes from the Executive Branch.

And again, I reiterate, this has nothing to do with the FOMC deliberations or micromanagement of daily Federal Reserve operations. The Fed just wants to keep the curtains closed and keep any outside eyes from reviewing how well or how badly its biggest policies are implemented.

Who knows whether the Fed's engine needs a tune-up if no one will let the mechanic look under the hood? Oh, by the way, that is not my quote. It is from a former chairman of this committee, Henry B. Gonzalez, whose portrait sits to my right, and who very well may have been the single most liberal Democrat to ever Chair this committee.

My, how the times have changed.

As our witness, Dr. Mark Calabria of the Cato Institute, testified last week, the reason it is important for the Fed to reveal its rule or operating model is, “so that it can be examined and tested by those outside the Fed. Only under such examination can we learn how the model captures the real world.”

The Fed has yet to corner the market on Ph.D. economists or monetary policy experts. Quite simply, the Fed’s work should bear the scrutiny and critical examination of others.

With respect to the other portions of the FRAT Act, it remains an open question whether the Fed should serve any role as a prudential regulator. But regardless of the answer to that question, the Fed should no longer be permitted to hide its prudential regulatory actions behind its monetary policy independence cloak.

This is particularly true when we consider the Fed’s sweeping powers under the Dodd-Frank Act to control an ever-increasing share of the American economy.

When it comes to prudential regulations, it is clearly time to hold the Fed to the same openness and transparency standards that we require of other Federal agencies. This includes mandatory cost-benefit analysis, also known as common sense.

Finally, many have wondered about the Fed’s view of the FRAT Act. I have not. During my congressional tenure I have yet to encounter one Federal agency that has requested less power, fewer resources, or more accountability. I doubt the Fed will be the first.

I now yield to the ranking member for an opening statement.

Ms. WATERS. Thank you, Mr. Chairman.

And welcome back, Chair Yellen.

Chair Yellen, it has been 5 months since you last appeared before this committee, and in that time, much has changed. Absent major changes in our economic outlook, the Federal Reserve’s program of large-scale asset purchases, known as quantitative easing, is set to end in October, and many are looking to see what the Fed will do once the program subsides.

The challenges are significant. Although employment levels for many sectors have continued to rise, stable and consistent growth is uneven and is not a given.

In a surprise turn, GDP dropped substantially in the first quarter. Unemployment remains unacceptably high, particularly for minority groups. African Americans face an unemployment rate of 10.7 percent; 7.8 percent for Latinos.

So let’s be clear. While we have made much progress, the long-term effects of the financial crisis, the worst since the Great Depression, can still be felt by working people and people still looking for work in every one of our communities across the country.

Of course, the problem of unemployment has only been made worse by Republican intransigence on any number of measures, from refusing to invest in our country’s job-creating infrastructure, to cutting investments in education that will fuel the next generation of American leaders, to their refusal to extend benefits for our friends and neighbors suffering from long-term unemployment.

And other important programs that create jobs and economic growth, such as the Export-Import Bank and the Terrorism Risk Insurance Act, remain needlessly tied up in a Republican ideolog-

ical war, creating widespread uncertainty for our Nation's job creators.

In the wake of legislative uncertainty and fiscal recklessness, some of my colleagues on the other side of the aisle are likewise attempting to stop the Fed from taking action to jumpstart our economy and preserve economic stability. They have recently proposed harmful legislation that would take unprecedented steps to virtually eliminate the Federal Open Markets Committee's role in shaping monetary policy.

Instead, Republicans prefer to put decisions related to inflation and employment on autopilot, determined arbitrarily based upon a rigid set of factors. If enacted, this proposal would undercut the Fed's ability to respond to emerging threats through rules and requirements designed to paralyze Fed rulemaking and to curtail monetary policy discretion.

This would include concerns emanating from areas like social media, which the Fed noted just yesterday appears to be substantially stretched. Quite simply, the straitjacket approach taken in the Republican bill would leave the Fed with few options, powerless to deal with an emerging area of concern even if it were to pose a danger to our economy.

Whether emerging threats to financial stability come from social media or elsewhere, this shortsighted legislation would be a recipe for disaster.

Chair Yellen, I am eager to hear your views on how our economy would have fared during the crisis and would fare in the future with such a regime in place.

Finally, I am very interested to hear about the Fed's progress in meeting the heightened regulatory policy mandate entrusted to the institution under the Wall Street Reform Act. In particular, I want to urge the Fed to expeditiously implement the unfinished provisions of the Act and to faithfully enforce the provisions of the law—provisions like robust living wills and a strong Volcker Rule that provide the tools for preventing the next 2008 crisis.

Thank you, Mr. Chairman, and I yield back the balance of my time.

Chairman HENSARLING. The Chair now recognizes the gentleman from Michigan, Mr. Huizenga, the vice chairman of our Monetary Policy Subcommittee, and co-author of the Federal Reserve Accountability and Transparency Act, for 3 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman. And, as predicted, the apocalyptic view has emerged already here in regards to my particular bill.

But I do have to say, Chair Yellen, that I give you credit. I watched some of your testimony last evening on TV of what you did in the Senate, and I give you credit for coming in front of this committee and giving us time; you have been very generous with that.

But we both know that over the past several years the Federal Reserve has gained unprecedented power, influence, and control over the financial system, while remaining shrouded in mystery to the American people.

This standard operating procedure, I believe, can't continue. We must lift the veil of secrecy and ensure that the Fed is accountable to the people's representatives. This is not about your independ-

ence or the independence of the Federal Reserve, but about accountability and transparency.

And at this point I won't go on my oversight rant that I did back at our hearing on the bill, where I just don't understand why many of my colleagues aren't interested in embracing the responsibility of their job to go and exercise oversight, and have a lack of interest in doing that.

But last week my colleague, Scott Garrett, and I introduced H.R. 5018, and this legislation will start to pull back the curtain at the Fed to increase accountability and transparency.

The Dodd-Frank Act bestowed massive new regulatory authority upon the Federal Reserve, yet the Fed is not required to conduct cost-benefit analysis when it considers new regulations, unlike all the other financial regulators, such as the SEC and the CFTC.

Additionally, this legislation urges the Fed to adopt a rules-based approach, as the chairman had talked about, to the monetary policy, instead of the continued ad hoc strategy currently being employed. Should the Fed fail to adopt a rules-based approach, it would trigger an audit of the Fed's books, and unlike the view that this is going to somehow chill this, I can tell you that many people believe this doesn't go far enough.

In fact, I support that as well, and I never thought that I would agree with the former chairman, Henry Gonzalez, about doing an audit of the Fed, but if it was good enough for him in 1993, I think it is probably good enough for us here at the centennial, as well.

But additionally, this legislation urges the Fed to—sorry—economists across the ideological spectrum have called upon the Fed to set this kind of monetary policy according to a mathematical rule that uses economic data, such as the rates of inflation and unemployment and to share that rule with the public.

We cannot have a power entity within the Federal Government without—just operating on a whim.

This legislation codifies the common-sense principle of using a rules-based approach when determining monetary policy, and I believe it is time to bring the Federal Reserve out of the shadows and provide hardworking taxpayers with a more open and transparent government.

My bill last week was labeled the “Spanish Inquisition,” and all kinds of other things were thrown around. But again, I believe it is our job, our constitutional duty, our constitutional responsibility, to work with you and to have oversight of the operations.

And with that, Mr. Chairman, I yield back. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from New York, Mr. Meeks, the ranking member of our Financial Institutions Subcommittee, for a minute and a half.

Mr. MEEKS. Thank you, Mr. Chairman.

And thank you, Madam Chair.

Chair Yellen, it is with great pleasure that we welcome you here again this morning. And I want to extend my deep appreciation to you and your staff for the significant amount of time you have spent on the Hill and also for welcoming congressional staffers at the Federal Reserve. That is tremendously important.

I, too, was listening to some of your testimony yesterday before the Senate Banking Committee, and you mentioned that the United States labor markets are far from healthy.

I applaud your remarks, and I think that you are absolutely right.

The latest data from the Bureau of Economic Analysis show that Americans' personal income is barely growing at a tepid rate of only 0.3 percent. In fact, other reports indicate that the American real wages are still lower than before the crisis.

Members of this chamber are closest to the American people that we represent in Congress, and I can assure you that we hear loudly and clearly from them that they are not feeling this recovery.

In fact, when preparing for this hearing I took to social media, just asking them what questions they would like me to ask you, and what were their current conditions. And they said—too many said, especially the younger Americans, that they are struggling to get jobs, and when they do get jobs, the wages are barely sufficient to make ends meet. Too many have been unemployed for more than 2 years or 3 years or more, and they have exited the job market out of frustration.

Too many are concerned about their job security and their ability to save or invest in their future.

Thank you, and I wait to hear your testimony, Madam Chair.

I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from Alabama, Ms. Sewell, for a minute and a half.

Ms. SEWELL. Mr. Chairman and Ranking Member Waters, I want to add to the voice—add my voice to the choir of those welcoming Chair Yellen here today. Today's hearing with Chair Yellen is critically important as we receive an update on the state of the economy and the Federal Reserve's essential role in our economic recovery.

I want to applaud Chair Yellen and the entire Federal Reserve for their diligent work towards fulfilling its congressional mandate of helping maximize employment, stabilize prices, and moderate long-term interest rates. Thanks in part to the Federal Reserve's insight and pragmatic monetary policies, our economy continues to experience positive and steady economy growth.

I also want to encourage the Federal Reserve to continue to work as quickly as possible to enact rules that fulfill the promise of strengthening our financial system and protecting our consumers.

As this committee continues to engage in conversation with key individuals surrounding the state of our national economy, we must be ever vigilant in working to ensure that we avoid any and all self-inflicted economic setbacks. It is important that we hear from Chair Yellen and work to pass legislation that fosters a stronger and more resilient financial system, rather than enacting strict policy rules that would impair the Federal Reserve's ability to do its job.

We must develop and promote fair and balanced monetary economic policies that ensure the long-term growth and vitality of our economy. The American people deserve nothing less.

Thank you.

Chairman HENSARLING. The gentlelady yields back.

Before introducing our witness, I wish to make a scheduling announcement. Contrary to the Chair's last appearance, where she stayed to answer all Member questions, she has requested to be excused at 1 p.m. for today's hearing and for future hearings, so I wish to alert Members of that. I have neither the desire nor the ability to hold the Chair against her will, but I am disappointed in the change of heart.

Notwithstanding my disappointment, Madam Chair, you are nonetheless welcome. We welcome your testimony today.

Chair Yellen has previously testified before our committee, so I believe she needs no further introduction. Without objection, Chair Yellen's written statement will be made a part of the record.

Chair Yellen, you are now recognized for your oral presentation of your testimony.

**STATEMENT OF THE HONORABLE JANET L. YELLEN, CHAIR,
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM**

Mrs. YELLEN. Chairman Hensarling, Ranking Member Waters, and members of the committee, I am pleased to present the Federal Reserve's semi-annual monetary policy report to the Congress.

In my remarks today I will discuss the current economic situation and outlook before turning to monetary policy. I will conclude with a few words about financial stability.

The economy is continuing to make progress toward the Federal Reserve's objectives of maximum employment and price stability. In the labor market, gains in total nonfarm payroll employment averaged about 230,000 per month over the first half of this year, a somewhat stronger pace than in 2013, and enough to bring the total increase in jobs during the economic recovery thus far to more than 9 million.

The unemployment rate has fallen nearly 1.5 percentage points over the past year, and stood at 6.1 percent in June, down about 4 percentage points from its peak. Broader measures of labor utilization have also registered notable improvements over the past year.

Real gross domestic product is estimated to have declined sharply in the first quarter. The decline appears to have resulted mostly from transitory factors, and a number of recent indicators of production and spending suggest that growth rebounded in the second quarter, but this bears close watching.

The housing sector, however, has shown little recent progress. While this sector has recovered notably from its earlier trough, housing activity leveled off in the wake of last year's increase in mortgage rates, and readings this year have, overall, continued to be disappointing.

Although the economy continues to improve, the recovery is not yet complete. Even with the recent declines, the unemployment rate remains above Federal Open Market Committee participants' estimates of its longer-run normal level. Labor force participation appears weaker than one would expect based on the aging of the population and the level of unemployment.

These and other indications that significant slack remains in labor markets are corroborated by the continued slow pace of growth in most measures of hourly compensation.

Inflation has moved up in recent months but remains below the FOMC's 2 percent objective for inflation over the longer run. The personal consumption expenditures, or PCE price index, increased 1.8 percent over the 12 months through May. Pressures on food and energy prices account for some of the increase in PCE price inflation.

Core inflation, which excludes food and energy prices, rose 1.5 percent. Most committee participants project that both total and core inflation will be between 1.5 and 1.75 percent for this year as a whole.

Although the decline in GDP in the first quarter led to some downgrading of our growth projections for this year, I and other FOMC participants continue to anticipate that economic activity will expand at a moderate pace over the next several years, supported by accommodative monetary policy, a waning drag from fiscal policy, the lagged effects of higher home prices and equity values, and strengthening foreign growth.

The committee sees the projected pace of economic growth as sufficient to support ongoing improvement in the labor market with further job gains. And the unemployment rate is anticipated to decline toward its longer-run, sustainable level.

Consistent with the anticipated further recovery in the labor market, and given that longer-term inflation expectations appear to be well-anchored, we expect inflation to move back toward our 2 percent objective over coming years. As always, considerable uncertainty surrounds our projections for economic growth, unemployment, and inflation. FOMC participants currently judge these risks to be nearly balanced, but to warrant monitoring in the months ahead.

I will now turn to monetary policy. The FOMC is committed to policies that promote maximum employment and price stability, consistent with our dual mandate from Congress. Given the economic situation that I just described, we judge that a high degree of monetary policy accommodation remains appropriate.

Consistent with that assessment, we have maintained the target range for the Federal funds rate at 0 to 1/4 percent and have continued to rely on large-scale asset purchases and forward guidance about the future path of the Federal funds rate to provide the appropriate level of support for the economy.

In light of the cumulative progress toward maximum employment that has occurred since the inception of the Federal Reserve's asset purchase program in September 2012, and the FOMC's assessment that labor market conditions would continue to improve, the committee has made measured reductions in the monthly pace of our asset purchases at each of our regular meetings this year.

If incoming data continue to support our expectation of ongoing improvement in labor market conditions and inflation moving back toward 2 percent, the committee likely will make further measured reductions in the pace of asset purchases at upcoming meetings, with purchases concluding after the October meeting. Even after the committee ends these purchases, the Federal Reserve's sizable

holdings of longer-term securities will help maintain accommodative financial conditions, thus supporting further progress in returning employment and inflation to mandate-consistent levels.

The committee is also fostering accommodative financial conditions through forward guidance that provides greater clarity about our policy outlook and expectations for the future path of the Federal funds rate. Since March, our post-meeting statements have included a description of the framework that is guiding our monetary policy decisions.

Specifically, our decisions are and will be based on an assessment of the progress, both realized and expected, toward our objectives of maximum employment and 2 percent inflation. Our evaluation will not hinge on one or two factors, but rather, will take into account a wide range of information, including measures of labor market conditions, indicators of inflation, and long-term inflation expectations, and readings on financial developments.

Based on its assessment of these factors, in June the committee reiterated its expectation that the current target range for the Federal funds rate likely will be appropriate for a considerable period after the asset purchase program ends, especially if projected inflation continues to run below the committee's 2 percent longer-run goal, and provided that inflation expectations remain well-anchored.

In addition, we currently anticipate that even after employment and inflation are near mandate-consistent levels, economic conditions may for some time warrant keeping the Federal funds rate below levels that the committee views as normal in the longer run. Of course, the outlook for the economy and financial markets is never certain, and now is no exception. Therefore, the committee's decisions about the path of the Federal funds rate remain dependent on our assessment of incoming information and the implications for the economic outlook.

If the labor market continues to improve more quickly than anticipated by the committee, resulting in faster convergence toward our dual objectives, then increases in the Federal funds rate target likely would occur sooner and be more rapid than currently envisioned. Conversely, if economic performance is disappointing, then the future path of interest rates likely would be more accommodative than currently anticipated.

The committee remains confident that it has the tools it needs to raise short-term interest rates when the time is right and to achieve the desired level of short-term interest rates thereafter, even with the Federal Reserve's elevated balance sheet. At our meetings this spring, we have been constructively working through the many issues associated with the eventual normalization of the stance and conduct of monetary policy.

These ongoing discussions are a matter of prudent planning and do not imply any imminent change in the stance of monetary policy. The committee will continue its discussions in upcoming meetings, and we expect to provide additional information later this year.

The committee recognizes that low interest rates may provide incentives for some investors to reach for yield, and those actions could increase vulnerabilities in the financial system to adverse

events. While prices of real estate, equities, and corporate bonds have risen appreciably and valuation metrics have increased, they remain generally in line with historical norms.

In some sectors, such as lower-rated corporate debt, valuations appear stretched and issuance has been brisk. Accordingly, we are closely monitoring developments in the leveraged-loan market and are working to enhance the effectiveness of our supervisory guidance.

More broadly, the financial sector has continued to become more resilient as banks have continued to boost their capital and liquidity positions and growth in wholesale short-term funding in financial markets has been modest.

In sum, since the February monetary policy report, further important progress has been made in restoring the economy to health and in strengthening the financial system. Yet too many Americans remain unemployed, inflation remains below our longer-run objective, and not all of the necessary financial reform initiatives have been completed.

The Federal Reserve remains committed to employing all of its resources and tools to achieve its macroeconomic objectives and to foster a stronger and more resilient financial system.

Thank you. I would be pleased to take your questions.

[The prepared statement of Chair Yellen can be found on page 54 of the appendix.]

Chairman HENSARLING. The Chair now recognizes himself for questions.

Chair Yellen, my first question has to do with Mr. Huizenga's and Mr. Garrett's legislation. On the one hand, it has only been in the public domain for a little over a week; on the other hand, it is only 31 pages long. But have you had a chance to read and review this legislation?

Mrs. YELLEN. I have had the chance to review the legislation, yes.

Chairman HENSARLING. Yesterday, before the Senate Banking Committee, you opined that under this legislation the Fed would not have had the flexibility it needed to take the actions that it took during the financial crisis.

I would commend for your review Section 2(e), on page 7 of the legislation, entitled, "Changing Market Conditions," which reads in part, "Nothing in this Act shall be construed to require that the plans with respect to the systematic quantitative adjustment of the Policy Instrument Target described under Subsection (c)(2) be implemented if the Federal Open Market Committee determines that such plans cannot or should not be achieved due to changing market conditions."

I personally don't believe the language could have been any clearer. It is not the intent of the legislation—and I would certainly welcome any policy feedback from your experts to assure that it achieves that purpose. But I believe the language is about as clear as the language could possibly be.

Chair Yellen, let's talk a little bit about independence. Larry Summers, in a famous paper in the *Journal on Money, Credit & Banking* on central bank independence, measures independence as, "The institutional relationship between the central bank and the

executive, the procedure to nominate and dismiss the head of the central bank, the role of government officials on the central bank board, and the frequency of contacts between the executive and the bank.”

Do you agree or disagree with his characterization of Federal Reserve independence?

Mrs. YELLEN. I see Federal Reserve independence—of course, we are a creature of Congress. We have a responsibility to report to Congress. And you use the term “Executive Branch,” I think, in the material—

Chairman HENSARLING. Well, I used the term that Larry Summers used in his paper, yes.

Mrs. YELLEN. I see us as needing to report regularly to Congress about our conduct of monetary policy in the economy.

Chairman HENSARLING. Let me ask you this question, Chair Yellen. I think it is well-established—I am under the impression, again, that you are required to appear before our committee and the Senate Banking Committee on a semi-annual basis. Is it true that there is a weekly meeting between you and the Secretary of the Treasury?

Mrs. YELLEN. Many weeks. It is not every single—

Chairman HENSARLING. Most weeks.

Mrs. YELLEN. —week. Many weeks we get together and confer about matters of mutual concern. But we are completely independent from the Executive Branch in the conduct of—

Chairman HENSARLING. Speaking of matters of mutual concern and independence, I am certainly not interested in a transcript of a private luncheon, but would you be willing to report to this committee on the matters of mutual concern that were discussed in any agreements reached between Treasury and the Federal Reserve?

Mrs. YELLEN. I am not willing to report on a regular basis on private conversations that I have, but any agreements that were reached certainly would be in the public domain. But our conversations do not result—

Chairman HENSARLING. How would they get into the public domain?

Mrs. YELLEN. If there were an agreement—

Chairman HENSARLING. If you don’t report them, how do they get into the public domain—agreements between the Federal Reserve and Treasury?

Mrs. YELLEN. There was, for example, during the financial crisis, a question as to what is the appropriate role of the Federal Reserve in lending programs and when does the Treasury need to be involved? When is there a fiscal component?

And those discussions led to a formal agreement between the Treasury and the Federal Reserve—

Chairman HENSARLING. My time is starting to wind down.

If I could address another matter, on page three of your testimony, it reads, “Even after the Committee ends these purchases,” so we are speaking of tapering, “the Federal Reserve’s sizable holdings of longer-term securities will help maintain accommodative financial conditions, thus supporting further progress in returning employment and inflation to mandate-consistent levels.”

Is there any current plan or any current commitment to reduce the Fed's balance sheets to historic levels? And I am not speaking of what you may want to do or what you might do, but is there any current commitment or plan to reduce the Fed's balance sheet to historic levels?

Mrs. YELLEN. As the FOMC stated in 2012, I believe, we issued a set of exit principles in which one of the principles was that over time we sought to normalize the size of our balance sheet and to bring it down to the smallest level consistent with the efficient and effective conduct of monetary policy.

Chairman HENSARLING. Chair Yellen, would you characterize that, then, as a current plan or current commitment to reduce the Fed's balance sheet to historic levels?

Mrs. YELLEN. I would characterize it as a current plan. We are discussing our principles for the normalization of policy. And as I indicated in my testimony, I expect we will be able to give more complete guidance later this year when those discussions are complete.

And I fully expect that we would reiterate an intention over time to reduce the size of our balance sheet.

Chairman HENSARLING. Thank you.

The Chair now recognizes the ranking member.

Ms. WATERS. Thank you very much.

Legislation that was offered by the Republicans on our committee last week would require the Federal Reserve's Federal Open Market Committee to issue a rule to dictate the course of monetary policy.

In your view, how feasible would it be to design a rule that would act as an appropriate substitute for independent judgment and discretion in the determination of monetary policy? And do you expect that such a rule could adequately respond to the range of economic data that affect the economy on any given day?

Mrs. YELLEN. I feel, Congresswoman, that it would be a grave mistake for the Fed to commit to conduct monetary policy according to a mathematical rule. No central bank does that.

I believe that although under the legislation we could depart from that rule, the level of short-term scrutiny that would be brought on the Fed in real-time reviews of our policy decisions would essentially undermine central bank independence in the conduct of monetary policy.

And I believe that global experience has shown that we have better macroeconomic performance when central banks are removed from short-term political pressures and given the independence to, within a framework in which their goals are clear—and in our case those are specified by Congress—given operational independence to decide how to conduct monetary policy.

The Federal Reserve is the most transparent central bank, to my knowledge, in the world. We have made clear how we interpret our mandate and our objectives and provide extensive commentary and guidance on how we go about making monetary policy decisions.

We do, I should say, routinely consult the recommendations of a whole variety of rules in thinking about monetary policy. And I have indicated previously in speeches I have made that these can be useful starting places or guides to policy. So I am not 100 per-

cent negative on using rules in thinking through what we should do.

But I think it is very important to understand that had we followed, in the aftermath of the financial crisis, the recommendations of any of the simple rules that are widely discussed, the outcomes would have been even more disappointing than what we experienced. Even with the Federal Reserve's conduct of policy departing very substantially from what those rules would have recommended, we have had a long, slow grind to get this economy recovering.

We actually could not have followed the recommendations of the simple rule. Almost every rule would have called, during, for example, 2011 and 2012, for negative interest rates, something that is impossible.

And that is one reason that we began asset purchases. We needed a further tool.

Given the fact that we have had unusual headwinds constraining this recovery, I believe it is utterly necessary for us to provide more monetary policy accommodation than those simple rules would have suggested.

And I think history would show that following any of those simple rules would have given us very much worse performance. So I feel it would be a mistake.

Although those rules sometimes do have merit in normal times, during the great moderation when there were relatively few shocks, and the Federal Reserve's behavior was very rule-like; it corresponded to some of those rules. They can work well, but not always.

We can't be mathematically bound to a simple formula.

Ms. WATERS. I would like to thank you for that explanation. You could not be clearer.

And you could not have explained better to this committee why you certainly could not operate with some cookie-cutter rule when in fact, as you explained, the headwinds that you were confronted with or that the Feds were confronted with required discretion. It absolutely required that you had the flexibility to deal with unforeseen circumstances in having to make your decisions. And I want to thank you very much.

I yield back the balance of my time.

Chairman HENSARLING. The Chair now recognizes the gentleman from Michigan, Mr. Huizenga, vice chairman of our Monetary Policy Subcommittee.

Mr. HUIZENGA. Thank you, Mr. Chairman.

I have a quick question, Chair Yellen. Have you read my bill—the Garrett-Huizenga bill?

Mrs. YELLEN. I have looked at the bill.

Mr. HUIZENGA. You have looked at it? Okay. Well, that is good news. I will, then, I guess, just refresh your memory and address my colleague from California.

We anticipated that might be a concern of yours, so on page 8 of the bill, under subsection 2, the GAO approval of an update—and we are not going to get into whether there should or shouldn't be the rule or does the rule go far enough, et cetera, et cetera.

However, it does say, "Upon determining that plans described in paragraph (1) cannot or should not be achieved, the Federal Open

Market Committee shall submit an explanation for that determination and an updated version of the Directive Policy Rule to the Comptroller General of the United States and the appropriate congressional committees not later than 48 hours after making the determination.”

It goes on to say that if they determine that you are not in compliance with the new rule, then you get audited. It does not say that you cannot change the rule. What it says is you have to notify us and notify them.

I am a history buff, so I went back and did a little history. We got to where we are today because of the Employment Act of 1946, where Congress felt it needed to lay out what Fed policy was.

In the 1970s they felt—Congress, my colleagues, felt it was too vague and therefore created a bill that would strengthen and clarify the 1946 Act. It actually had three goals, not two. It is not a dual mandate, it is actually a tri-mandate by Congress: stable prices; maximized employment; and moderate long-term interest rates.

So on page three of your testimony you are talking about—and I am going to quote, it is the second paragraph down—“Even after the Committee ends these purchases, the Federal Reserve’s sizable holdings of longer-term securities will help maintain accommodative financial conditions, thus supporting further progress in returning employment and inflation to mandate-consistent levels.”

Where in the Humphrey-Hawkins Act—which was signed, oh, by the way, I’m sorry, my colleagues, by Jimmy Carter in 1978 after Democrats in the House and the Senate passed the bill—do we lay out a 2 percent inflation rate? Do we do that?

Mrs. YELLEN. You do not make specific in the legislation—

Mr. HUIZENGA. Do we lay out exactly what employment rates or unemployment rates should be?

Mrs. YELLEN. The FOMC has—

Mr. HUIZENGA. No, no, I’m sorry, Congress—the bill that was passed by Democrats in the House and the Senate and signed by Jimmy Carter, does that mandate what the employment rate should be?

Mrs. YELLEN. The bill uses the terms, as you said, “maximum employment” and “price stability.”

Mr. HUIZENGA. Okay, so we don’t prescriptively say it is going to be a 2 percent inflation rate target and 5 or 6 percent employment rate.

Mrs. YELLEN. It is obviously language of the type that is in the legislation. We need to interpret—

Mr. HUIZENGA. Do we lay it out?

Mrs. YELLEN. You do not, but we have tried to—

Mr. HUIZENGA. Okay. All right. There we go.

So I am curious how us requesting a rule—a simple step in most people’s view—a simple rules-based policy, how is that different than the mandate—the tri-mandate that was laid out in Humphrey-Hawkins and defended every single day by others in this committee?

How, when we are asking for what the rule is—not telling you what the rule is, not being prescriptive or even descriptive, but just saying, “Set a rule and then let us know so that we can have over-

sight.” I here will reference my rant on oversight to my colleagues who can go back and watch it on YouTube if they weren’t in the committee room.

So if we can get as detailed as the Humphrey-Hawkins Act, or lack of detail, why can’t we have a rule and have you all at the Fed accept that? And if you are not willing to accept it because you are concerned about your independence—is that one of your reasons? I don’t want to put words in your mouth. Is that one of your reasons why you don’t want to sign on to the Garrett-Huizenga bill?

Mrs. YELLEN. I am not aware of any literature which establishes that a central bank, whether it makes it public or not, adopting a rule is the most desirable way to run monetary policy. And I would say that many—

Mr. HUIZENGA. You might want to talk to the Europeans about that and a lot of other economists, as well.

Mrs. YELLEN. What the Europeans do is the ECB has been given a great freedom and they have defined a price stability objective, and they certainly do not—

Mr. HUIZENGA. Here is my last request: If the Garrett-Huizenga bill isn’t good enough, I would like to know when the Fed is going to call for a rescission of the Humphrey-Hawkins Act because it impedes your independence.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from New York, Mrs. Maloney, ranking member of our Capital Markets Subcommittee.

Mrs. MALONEY. Thank you.

And welcome, Madam Chair.

I would like to ask you about the Fed’s exit from its monetary stimulus. As you testified, the Fed is currently on pace to wind down its QE3 purchases by the end of October. But right now the market isn’t expecting the Fed to start raising interest rates until the third quarter of 2015.

So between October of this year and the third quarter of 2015, what are the main tools that the Fed anticipates using to exit from its monetary stimulus?

Mrs. YELLEN. Well, thank you.

As I indicated, if the committee continues to see improvement in the labor market and continues to forecast ongoing progress in the labor market over time, and inflation moving back toward 2 percent, it is our intention to wind down our asset purchases, to conclude them after the October meeting.

Beyond that, we would maintain the zero to quarter percent range for the Federal funds rate that we have maintained now for many years. And eventually, as the economy makes further progress, we would begin to raise our target for short-term interest rates.

And while we have not laid out a specific timeline for doing that, we have given a general principle, which is we will be assessing what is our actual progress and then our expected future progress toward obtaining the two objectives of maximum employment and price stability. So we will be looking at how far we are from our objectives and how rapidly those gaps are closing.

Now that is a matter that we can't be certain about. We make forecasts, but incoming data causes us, over time, to change those forecasts. So I can't be specific about what the timing of an ultimate increase in our target for short-term interest rates would be, but we will be assessing incoming information.

Now, we do give participants in the FOMC—these are not FOMC policy statements, but we have provided in the monetary policy report and we provide every 3 months—information about each FOMC participant's assessment of both the economic outlook and their views on the likely path of monetary policy. So again, this is each individual's view walking in to our June meeting.

As a committee we have to transform that into a single policy, but it gives some indication, I think. And given their expectations for progress in the labor market and inflation, at the beginning of our June meeting, FOMC participants, almost all of them, saw it appropriate to begin raising our target for the Federal funds rate sometime during 2015. The median participant saw the Federal funds rate by the end of that year standing around 1 percent.

So while there is no exact timing, obviously, in 2015, it is in some sense roughly consistent with what you said. But market expectations are—but again, I want to emphasize that the actual progress we see in the labor market and inflation and our general assessment of the labor market could change that over time, so there is no mechanical formula and no clear date.

Mrs. MALONEY. Will the Fed start changing the interest rate on excess reserves held at the Fed during this time?

Mrs. YELLEN. When we decide to raise our target for short-term interest rates a key tool will be to raise the interest rate we pay on excess reserves. So we would only raise the interest rate on excess reserves when we have determined that the time has come to begin raising short-term interest rates more generally. That will be a key tool that we will use.

Mrs. MALONEY. Last week Federal Reserve Vice Chairman Stanley Fischer gave a speech in which he suggested that adding a financial stability mandate to the overall mandates of all the U.S. financial regulators could help improve financial stability. Can you comment on the effects of adding an explicit financial—I guess I will get that response in writing. My time has expired. Thank you.

Thank you—

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from Alabama, Mr. Bachus, the chairman emeritus of our committee.

Mr. BACHUS. Thank you.

Chair Yellen, let me begin by saying that this will be my final Federal monetary policy hearing that I will participate in as a Member of Congress because I am retiring at the end of this year.

During my 22 years of service on this committee, including my 6-year term as ranking member and then chairman, I have heard testimony from Federal Reserve Chairs Alan Greenspan, Ben Bernanke, and now, of course, yourself. My observation during these times of both prosperity and during times of financial crisis is that we have leaders and a professional staff at the Fed who have conducted themselves with honor and who have been true public servants.

So let me thank you and your professional staff, as well as your predecessors, for serving the people of America in this most important and tremendously demanding position.

Mrs. YELLEN. Thank you, Congressman. I appreciate that.

Mr. BACHUS. Thank you.

We have seen that FSOC, where the Fed is obviously a key player, exercise the authority granted by Dodd-Frank to designate institutions as systemically important financial institutions (SIFIs). This has included asset managers and insurance companies, which has been somewhat controversial.

My experience is that there is often a greater resistance to a designation or a ruling when the parties feel they haven't been consulted or the process is not transparent enough. So one of the approaches that is attracting some interest is to require that companies being considered for a SIFI designation be provided with specific reasons why and also a description of steps they could take so they might not be named as SIFIs. And this would be between the particular company and the Fed; it wouldn't be a public discussion.

Do you agree or would you consider that as a reasonable approach? It would bring greater transparency to the SIFI designation process. And I think laying out a clear methodology actually leads to more certainty and confidence in the process, and I think would be accepted more readily.

Mrs. YELLEN. This is clearly a very important thing that happens to a company when it is designated, and I believe it utterly has to be given every opportunity to understand the logic of why the FSOC is thinking that it poses systemic risk and every opportunity to present its own analysis of the issues and to interact with the staff and having a very good and frank dialogue and back and forth.

I believe that is part of the process. And the firms are given every opportunity to intensively interact with the committee and its staff before any organization is designated as a SIFI. That is completely appropriate.

Now, in that process there is a great deal of confidential information, so I don't feel it is appropriate for that to take place in the public domain.

Mr. BACHUS. And I would agree with you. I am talking about a give and take between the parties.

Mrs. YELLEN. I think that is absolutely appropriate. And to the best of my knowledge—I have not served on FSOC when any institution has been designated—when the institution gets into the latter stages of the process, there is a great deal of back and forth.

Mr. BACHUS. Thank you.

Let me talk about some demographic influences on labor force participation, because I know that concerns you; it concerns all of us.

Part of it is the rise in the service sector employment, where we have gone to a lot of part-time employment. Some good reasons by choice, some not. But also, many analysts think that it is being driven in part by an aging U.S. population, particularly as retirees exit the workforce.

Does the Fed take that into consideration when they talk—if labor force participation doesn't pick up and growth does, how does that affect your decision to keep rates low?

Chairman HENSARLING. A very brief answer, please.

Mrs. YELLEN. I fully agree with your point. Demographics and an aging population are driving and should be expected to drive the labor force participation rate down.

So the question is, has labor force participation fallen more than would be expected based on demographics? And my personal judgment is yes, it has fallen somewhat more than that, but aging is a very important downward force, and that is what I expect going forward.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from New York, Ms. Velazquez, for 5 minutes.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Madam Chair, with the prospect of 0 percent interest rates coming to an end, some have warned that this could unduly hamper economic growth. Yet artificially low interest rates pose a real threat of creating asset bubbles.

What has the Fed seen in the market concerning asset prices, and does the threat of a bubble outweigh any slowdown in economic growth?

Mrs. YELLEN. The Federal Reserve has been increasingly and intensely focused on financial stability, and we understand that maintaining interest rates at low levels for a long time can incent reach for yield or asset bubbles. So we are monitoring this very closely, and that is, in part, why I referenced some of these trends in my opening testimony.

My general assessment at this point is that threats to financial stability are at a moderate level and not a very high level. Some of the things that I would look at in assessing threats to financial stability to see if they are broad-based: broad measures of asset prices—of equities, of real estate, of debt—do they seem to be out of line with historical norms?

And I think there the answer is no. Some things may be on the high side and there may be some pockets where we see valuations becoming very stretched, but not generally.

Ms. VELAZQUEZ. Thank you.

Mrs. YELLEN. The use of leverage is not broad-based. It hasn't increased, and credit growth is not at alarming levels by any means.

Ms. VELAZQUEZ. Thank you.

Although the economy is recovering at an accelerated pace, many experts have warned of the disconnect between stock market gains and overall economic growth. What impact are the Fed's current monetary policies having on this phenomenon?

Mrs. YELLEN. An environment of low interest rates is one factor that affects asset prices generally, including equities. And so a low interest rate policy I think partially accounts for why housing prices have rebounded and also is an influence on equity prices, but it is not the only influence.

The economy is recovering and earnings have been—

Ms. VELAZQUEZ. But do you find this an issue to be concerning to you? Is it concerning to you?

Mrs. YELLEN. The issue being that monetary policy affects asset prices?

Ms. VELAZQUEZ. Yes.

Mrs. YELLEN. That is one of the—

Ms. VELAZQUEZ. The disconnect between stock market gains and overall economic growth?

Mrs. YELLEN. I don't have a view—the Federal Reserve doesn't take a view as to what the right level of equity or asset prices should be, but we do try to monitor to see if they are rising outside of levels consistent with historic norms.

And as I indicated, in spite of the fact that equity prices' broad indices have risen substantially, price equity ratios and other measures are not outside of historical norms. And I don't know what the right level of prices is, but in that sense I am not seeing—

Ms. VELAZQUEZ. Thank you.

Mrs. YELLEN. —alarming warning signals.

Ms. VELAZQUEZ. As we all know, the economy has been creating jobs at an accelerating pace recently, despite fears that tapering the Fed's qualitative easing could slow the recovery.

In your opinion, is this strong evidence that the economy has turned the corner and now is healthy enough to self-sustain the recovery?

Mrs. YELLEN. I am optimistic about the economy, and that is reflected in the forecasts that are included in the monetary policy report. We had a very surprising negative growth in the first quarter, which is a number that in a way doesn't seem consistent with the underlying momentum in the economy and many indicators of spending and production.

I do think the economy is recovering and that growth is picking up and that we have sufficient growth to support continued improvement in the labor market. And we have seen, maybe not progress over many years at the pace that would be ideal, but real progress that will continue.

Ms. VELAZQUEZ. Thank you.

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from New Jersey, Mr. Garrett, chairman of our Capital Markets Subcommittee.

Mr. GARRETT. Thank you, Mr. Chairman.

I have a couple of questions, Madam Chair.

Finally, after many, many months, we got responses to the questions that we put to you months ago. One of the questions came about because one of the Fed Governors has stated that they believe that a failure of a large broker-dealer would be destabilizing to the economy.

So we asked you, do you support expanding the Fed's discount window access to broker-dealers and other nonbanks during turbulent economic times to expand your regulator. You said no. You said, "I do not favor expanding the Fed's discount window to broker-dealers and nonbanks."

Instead, you say you support the application of stringent capital standards and liquidity requirements, and you also said that you support the development of resolution regimes. I get that.

If those regulations and the resolution regimes do not work, do you then rule out access to broker-dealers and other nonfinancial

institutions to the discount window? Is that what you are saying, that you rule that out?

Mrs. YELLEN. Under the terms of the Dodd-Frank Act, the Federal Reserve is barred from extending discount window lending to an individual firm—

Mr. GARRETT. Right.

Mrs. YELLEN. —and we are confined to broad-based facilities.

Mr. GARRETT. Right. So would you rule out, then, extending Section 13(3) as well?

Mrs. YELLEN. If there were general financial disruption and we were in the situation of systemic risk, similar to what we saw during the financial crisis, where we have a general panic—

Mr. GARRETT. Then you would use 13(3) to allow broker-dealers to have access to either 13(3) potentiality or access to the broker-dealer—to the discount window is what you are saying, under those circumstances?

Mrs. YELLEN. I believe a broad-based scheme in the situation of systemic risk is a possibility, but it is something that would have to be very seriously considered.

Mr. GARRETT. Right. So we would be actually extending the American public backstop to broker-dealers under your Administration, potentially, under the right circumstances, is what you just said? That is what I heard.

Mrs. YELLEN. It depends on the circumstances. But, again, I want to emphasize—

Mr. GARRETT. That is quite astounding, that broker-dealers and other nonbanks are on notice that they may have, under the right circumstances, 13(3)—

Mrs. YELLEN. It would have to be unusual and exigent and it would have to—

Mr. GARRETT. Understood. But now we know.

Secondly, Secretary Lew recently testified about the FSB, and after much questioning and answering we asked him, “What is the process?” And he said, “The FSB does not act—acts in a consensus manner.

And we asked, “Did you, Secretary Lew, consent to the designation of specific globally systemic firms?” And he said, “Yes, I did consent to them.”

So my question to you is very simply, did you agree with Secretary Lew? Did you also consent to those designations of globally systemic firms, or did you take a contrary view? Did you object?

Mrs. YELLEN. I have to say I was not at the time involved in any way with the FSB—

Mr. GARRETT. Okay.

Mrs. YELLEN. —and I am not at this time either.

Mr. GARRETT. Okay. You do not take part in any discussions with FSB as far as the determination of globally systemic—

Mrs. YELLEN. I have personally not been involved in those discussions. Governor Tarullo is our representative to the FSB, and he has been—

Mr. GARRETT. Governor Tarullo is our representative and not you. Has he consented, as far as you know?

Mrs. YELLEN. He may well have been involved in those discussions and consented. You would have to pose that question to him.

Mr. GARRETT. Okay. He doesn't come up to testify. That was one of the provisions of our bill, to see whether we could get him to start coming up here to testify on that section, but okay.

Do you believe that with regard to FSOC, the head of the New York Fed, Mr. Dudley, is an active participant? Is that correct, with respect to FSOC?

Mrs. YELLEN. I believe he has the status of observer.

Mr. GARRETT. My understanding is that you have given him active participation status. Is that correct, or is he just an observer?

Mrs. YELLEN. I am not in a position to make any rules about who can or cannot attend FSOC. Those are done by the leadership, which is—

Mr. GARRETT. Well, you allow him to attend, and—would you allow members of this committee to attend?

Mrs. YELLEN. It was not my decision.

Mr. GARRETT. To allow him to attend?

Chairman HENSARLING. The time of the gentleman has—

Mr. GARRETT. Can I just get an answer whether or not it was her decision that he should attend? Who allowed him to attend these meetings?

Chairman HENSARLING. Brief answer, please.

Mrs. YELLEN. I believe the Treasury Secretary.

Mr. GARRETT. Thank you.

Chairman HENSARLING. The Chair now recognizes the gentleman from California, Mr. Sherman.

Mr. SHERMAN. Chair Yellen, we learn a lot from you. Thanks for being here.

Mrs. YELLEN. Thank you.

Mr. SHERMAN. You also have a chance to learn from us, not because we have any great economic theories worthy of your consideration, but because we represent 60-plus districts from coast to coast. We are intensely aware of what is going on in our districts, and we prove that biannually.

And the reports you get from Members in this room as to what is happening in their districts are uniform even though our economic theories are disparate and, in many cases, unworthy of your attention.

The economy is worse than your statement indicates. There isn't a person in this room who has waxed eloquently about how everything is going spectacularly in their district. And many, many Members have told me and spoken about how in a very large percentage of this country we are still in a recession.

A second reason for you to push toward more quantitative easing and a continuation of low interest rates is that you have very few tools left if we slip back into recession, and you have all the inflation-fighting tools still available to you. I think you understand that.

There is a second area where I think you can learn from us, and that is not in the monetary policy area, but you are a top bank regulator. We had an exchange back in February in which you described how important it was to loan money in local communities.

And I explained to you, and I have talked to my colleagues here, but your regulators haven't gotten the memo. You can send them a copy of the remarks you made in response to my question in Feb-

ruary. Many, many small businesses can't get loans even with an appropriate risk premium.

In fact, if you are trying to borrow money at prime plus 5, oh, my God. You are terrible. We can't talk to you.

Rather than the idea that you are going to make a hundred loans and one of them is going to go under default, it is, "You are going to buy a hundred government bonds." And that is not a way that a bank can contribute to the economy.

You may remember back in February we talked about the Financial Accounting Standards Board lease-accounting project, which would capitalize all leases and add \$2 trillion to the liabilities of balance sheets of American business. And at that time you indicated that you would have your staff look at this both in terms as to whether you would want to comment on something that other economists have said will cost \$400 billion to our GDP as companies try to rebalance their balance sheets, and because nobody can build a big building without a long-term tenant, and if you penalize companies for signing long-term leases you are not going to have long-term tenants.

I wonder if you could at least recommit to having your staff look at that, and perhaps be willing to comment on it? Because those folks at the Financial Accounting Standards Board, the slightest hint from you or your staff would be very instructive to them.

And if they won't listen to you, at least you could price into your economic projections economic risk that only an accountant would bring to your attention. I wonder if you can comment on the lease accounting?

Mrs. YELLEN. We will have a look at that and get back to you.

Mr. SHERMAN. Okay. As to designating the SIFIs, I hope that you would focus not on the size of an entity's assets but the size of their liabilities. It was Lehman Brothers' inability to pay its liabilities that was the final straw that broke the economy.

If you had some blue-chip name that everybody loved and so they were able to issue trillions of dollars of credit-default swaps, I would say they would be a SIFI, and they would be particularly a SIFI if they didn't have a lot of assets because their failure would have a substantial effect on our economy.

So I hope that you would look at the liabilities and contingent liabilities of an entity, not their assets. And that would argue for not designating as a SIFI an unleveraged mutual fund since they don't have liabilities.

Mrs. YELLEN. FSOC is, in its analysis, just as you said, trying to identify whether there are specific and well-defined channels by which the failure of a particular organization would have spillovers to the rest of the financial system that would be severe. And it is not just a question of size and not just a question of the assets they hold.

But for example, if there are liabilities, and if they are highly runnable, and they are a highly-interconnected firm, that would point in the direction of systemic risk, as you indicate.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Texas, Mr. Neugebauer, chairman of our Housing and Insurance Subcommittee.

Mr. NEUGEBAUER. Thank you, Chairman Hensarling.

Chair Yellen, thank you for being here.

I want to go back to something you said in 1995. You said, "This policy, which fits the behavior of this committee, is an example of the type of hybrid rule that would be preferable, in my view, if we wanted a rule. I think the Greenspan Fed has done very well by following such a rule and I think this is sensible for central banks to do."

But earlier you said, "I am not aware of any literature that establishes that a central bank adopting a rule, whether it makes it public or not, is the most desirable way to run monetary policy."

So were you for it in 1995 and now you are against it in 2014? I am having trouble reconciling that.

Mrs. YELLEN. As I said also this morning, I think simple rules can be a helpful guide and starting point in thinking about the appropriate stance of monetary policy. I said that then and I continue to think that now. And I will say that before every FOMC meeting, I review the recommendations of a number of sensible, simple rules. And so as an input, I regard this as valuable.

Now during the time period that I was referencing in that 1995 statement, that was the so-called great moderation and there actually had been quite a lot of literature looking at the different ways to run monetary policy that established that simple rules, like the Taylor Rule, really could do quite a good job—maybe not the best possible, but quite a good job of delivering good economic performance.

And behavior during that time was not bound by a rule, but I think it was good policy. It had the characteristic that pretty systematically, as the labor market tightened, the stance of policy became tighter; and as inflation rose, policy became tighter, and tighter enough that real interest rates—the nominal interest rates, were raised more than inflation.

These are sensible ways to conduct monetary policy. Policy wasn't bound by a formula. It didn't adhere exactly to a mathematical formula. There were sometimes other factors that were important and factored in. But it was sensible.

But now in the more recent period—and I remain—I continue to think it is useful to look at simple rules and think about their recommendations. What I oppose is tying monetary policy to a rigid mathematical formula to any rule.

And we have now lived through a period where those rules would have performed just miserably. And if we had followed them we would have had even more dreadful macroeconomic performance than the disappointing recovery we have enjoyed.

I think that if the kinds of analysis that had been performed earlier that showed that these rules worked well, if you rerun this, that type of analysis through the period of the last 6 or 7 years, you would find that they would not have performed well. Even so, I hope that as the economy becomes more normal and as interest rates get back to more normal levels, that the world will be less volatile. I continue to think that the recommendations of such rules are worthwhile to look at.

I have given a number of speeches in recent years in which I have discussed those rules and their recommendations explicitly, and it is something I wouldn't do if I thought there wasn't some

value in it. On the other hand, I have tried to explain in a number of speeches why I think they would not have worked and would not have been appropriate in the circumstances we have been living—

Mr. NEUGEBAUER. I don't mean to be rude here, but—so what I hear you saying is that the rule structure is not totally unacceptable in the Fed scheme here, but you have some—

Mrs. YELLEN. Not rigidly tying our hands to something, but it is useful input. We have models. We have forecasts. We have a number of inputs into the policy process. And a rule is—rules, a collection of them, do provide useful input and we do take it into account. But I just would not go further than that.

Mr. NEUGEBAUER. Thank you.

And I guess my time has expired, Mr. Chairman.

Chairman HENSARLING. The gentleman yields back.

The Chair now recognizes the gentleman from Massachusetts, Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman. Mr. Chairman, I want to ask unanimous consent to submit a report for the record from Americans for Financial Reform, dated July 10, 2014, which I will refer to in my remarks.

Chairman HENSARLING. Without objection, it is so ordered.

Mr. LYNCH. Thank you, Mr. Chairman.

Welcome, Madam Chair. Thank you for your willingness to participate here, and thank you for your patience.

Last month Federal Governor Tarullo gave a speech in Boston and he described the stress test for the major banks as the cornerstone of the regulatory response to the recent financial crisis. Do you tend to agree with that?

Mrs. YELLEN. I think they have been very important in strengthening supervision.

Mr. LYNCH. Right. The idea of the stress tests, as I understand them, is that, well, the value in that annual stress test is that we inspect the capital reserves, we inspect the risk management policies within the banks, and when they pass—ideally, when they pass the stress tests, there is actually value in passing that stress test because they have a stamp of approval. Is that the idea behind this?

Mrs. YELLEN. I think it is really something more than what you just said, that we are using our own models and judgments to take a very detailed look at all of the asset holdings and transactions and exposures of a large financial firm and we are attempting to assess, in a well-specified, highly adverse stress scenario, an economic scenario that is extremely difficult—we are making our own very detailed assessment of whether or not that bank would have sufficient capital to continue to meet the lending needs of the economy and to continue to function.

And on top of that, we are insisting that the firm demonstrate to us that they have the ability to do that kind of analysis themselves and in that way—

Mr. LYNCH. Okay.

Mrs. YELLEN. —judging their risk management capabilities.

Mr. LYNCH. You put it much better than I could, but I agree with everything you just said.

So the legislation that was offered, called the Federal Reserve Accountability and Transparency Act, would require the Fed—in section four, would require the Fed to publish—to give the information to the major banks that are being tested, all of your methodologies, all of the—I will read it here—the hypothetical—excuse me—all of the alternatives that are—and public notice and comment rulemaking in advance of any stress test that detail the exact models, the methodologies, and assumptions to be used in the stress test.

So you would have to give that under this new bill. You would have to give that to the banks.

You would also have to allow them to comment and to help design the test that you are going to give them.

Now in my mind, if you are going to give the people the answers to the test, if you are going to let them design the test, won't there be an assumption that they can now game this test?

Mrs. YELLEN. Precisely. And that is exactly why we don't give them the models. We want them to, in a sense, show us their work and show us that they have the capacity in their organizations to make well-reasoned judgments about the risks that they face.

We absolutely don't want to give them the answers. And when you give the answers then you don't get to see the work that demonstrates that the student has learned the material and can apply that kind of logic in the unique circumstances that will face that firm, as opposed to just the scenarios that we have laid out.

Those firms need to be able to analyze their own unique and specific risks that they face. We set out a couple of scenarios and we do detailed analysis, but what are the unique stresses that could afflict a particular firm with particular characteristics?

We want to make sure they have models that will serve to analyze those situations. And they can't just use our models for that. They need to show us that they understand what the unique stresses are that could hit those firms as well.

Mr. LYNCH. I thank you, and I yield back.

Chairman HENSARLING. The Chair now recognizes the gentleman from Georgia, Mr. Westmoreland, for 5 minutes.

Mr. WESTMORELAND. Thank you, Chair Yellen, for being here.

I want to follow up just on one of the things that Mr. Garrett—one of your answers. You said that Mr. Tarullo is the Federal Reserve representative to the Financial Stability Board. You are his boss and you are the Chair of the Federal Reserve. Are we to really believe that the gentleman acts on his own without any direction or oversight from you?

Mrs. YELLEN. I think Congressman Garrett referred to decisions that were made about naming global systemically important banks, and that occurred before I was Chair. I am sure that he consulted with Chairman Bernanke.

Mr. WESTMORELAND. Okay. So he is not independent?

Mrs. YELLEN. Well, no. The Chairman obviously has responsibility.

Mr. WESTMORELAND. Okay. And just to go back to the independent part of the Federal Reserve from the Executive Branch, I am sure you are aware that of the 15 Chairmen in the Fed's history, 10 of them have either served at Treasury or the White

House. And it seems to be a revolving door-type policy between the Federal Reserve and the Treasury Department, and that it actually continues today.

And the Fed staff has gone back and forth into the Treasury Department, including in the current Administration. So do you believe that this revolving door poses any risk whatsoever to the Fed's independence?

Mrs. YELLEN. I think the Fed's independence is extremely important and I have never in my many years in the Fed seen anything occur that led me to believe that it had at any time been threatened. And while I understand the point you are making, it is essential that the Federal Reserve remain independent.

Mr. WESTMORELAND. Okay. And that kind of leads me—

Mrs. YELLEN. I perceive that—

Mr. WESTMORELAND. And I appreciate it. And that kind of leads me to the next question.

We here in Congress have been having a vigorous political debate about infrastructure spending and unemployment benefits to continue. And in your Senate testimony, you dived into this political debate, expressing your support for more infrastructure spending in response to questions from Senator Menendez.

In a recent letter to Representative Sinema, who is a member of this committee, you expressed the virtues of extending unemployment benefits. We will continue to debate the merits of this, but do you have any reservations that carrying the water for the Democrats on this fundamentally political issue risks the Fed's independence, impartiality, and indeed, its credibility?

Mrs. YELLEN. I don't think it is appropriate for me to weigh in on these issues and I don't—

Mr. WESTMORELAND. Why did you?

Mrs. YELLEN. —interpret—I do not interpret what I said about infrastructure to have been telling Congress what I think it should do. I commented, as I recall, to Senator Menendez on the stance of fiscal policy and the way it had been affecting the economy.

Mr. WESTMORELAND. So you don't think we need to spend on infrastructure?

Mrs. YELLEN. I—

Mr. WESTMORELAND. And that wasn't what you meant by your comment?

Mrs. YELLEN. I believe it is entirely appropriate for Congress to debate and decide that.

Mr. WESTMORELAND. Okay. Was it appropriate just to even talk about it? Didn't you answer Senator Menendez that, "it is up to you all, it is not up to me?"

Mrs. YELLEN. I believe that was the spirit, although I did comment on the fact that fiscal policy had posed a significant drag to economic growth over the last several years.

Mr. WESTMORELAND. Okay, quickly, the chairman's staff and the committee staff discussed the Federal Reserve's role in operating a payment system for the Treasury Department with the New York Fed staff.

Mrs. YELLEN. I'm sorry, what system? What type of system?

Mr. WESTMORELAND. The role in operating a payment system for the Treasury Department.

Mrs. YELLEN. A payment—okay.

Mr. WESTMORELAND. And they discussed it with the New York Fed staff who operate that system, and the staff of the New York Fed described the Fed's role there as Treasury's agent and described the Treasury Department as the Fed's client.

Is that a good characterization—just a yes or no—of your relationship?

Mrs. YELLEN. The Federal Reserve is the fiscal agent of the government, and in that sense, it is correct.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Georgia, Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

I am over here in the corner, Mrs. Yellen.

I would like to just take us briefly in another direction, because we don't operate in a vacuum in the United States. To what extent are the developments in various parts of the world that are taking place now, in Ukraine, in Iraq, possible caliphate there, the Israeli-Palestinian situation, Syria. The world is aflame, and I am wondering what effect this would have on our global economic growth and especially the United States economic outlook.

But something that is going a little bit unnoticed is another situation, and that situation is Iran.

By Sunday, as the deadline, and their decision and agreement is supposed to come out. And in collaboration with all of these other hot spots that are happening around the world, what would be the global impact in terms of economic growth, and where would the United States be? I know you and Treasury talk in concert on this, and particularly Treasury, which is basically enforcer of our sanctions, which is based largely on, quite honestly, the well-being of the United States economy.

What would happen Sunday if they don't come up with an agreement and ask for an expansion, or they do come up with an agreement that has nothing to do with dismantling and Israel will not accept it?

So Sunday presents a very timely issue and I thought we might benefit from your thoughts on that, including the other things that are happening in Iraq, Syria, Israel and so forth.

Mrs. YELLEN. Certainly, the developments that you are talking about present risk to the United States through any number of different channels. In trying to focus simply on the potential economic impact of these developments on the United States, I would be thinking particularly about energy markets, that we have seen some disruptions in energy supplies, and obviously there could be much larger disruptions in energy supplies. Such developments clearly would have an impact on the United States and on the global economy more broadly.

We also look at whether or not there are significant direct financial exposures, for example, of our banking system to particular regions that are troubled. In the case of the set of countries you mentioned, my assessment would be that the direct financial implications for our banking system would not be large, but in times of global unrest it is very normal to see disruptions in risk aversion rise in financial markets generally, and that would certainly, were

that to occur, have spillovers to the United States and to our outlook.

Mr. SCOTT. Okay. Thank you.

Now let me ask a question on your asset purchase program, which I think has done a good job in two important areas. I think it has made a very major contribution to lowering the unemployment, creating jobs, and very significantly in the housing market in terms of reducing mortgage rates.

Is that true? Is that pretty much—

Mrs. YELLEN. I believe it has made a positive contribution—

Mr. SCOTT. Okay.

Mrs. YELLEN. —in the ways that you have mentioned, yes.

Mr. SCOTT. Okay. I understand that you are going to end that program within a couple of months. So the issue is, would that have a downturn impact on the progress we have made in both unemployment and housing with this program?

Mrs. YELLEN. We are continuing to purchase assets, so in that sense we are continuing to add stimulus. And even if we stop our purchases, our large holdings will be supporting lower long-term interest rates and, I think, keeping mortgage rates lower, and will continue to provide a positive for the housing market.

If we lacked confidence that the labor market and the economy will continue to improve, we probably would not have been comfortable winding down the asset purchase program, but I do think the economy is improving, the labor market has improved, and will continue to do so.

Mr. NEUGEBAUER [presiding]. The time of the gentleman has expired.

Mr. SCOTT. Thank you very much, Chair Yellen.

Mr. NEUGEBAUER. I now yield to the chairman of our Oversight and Investigations Subcommittee, Mr. McHenry.

Mr. MCHENRY. I thank the chairman.

Chair Yellen, thank you for being here.

Mrs. YELLEN. Thank you.

Mr. MCHENRY. I know these days are long, but I wanted to ask you about something that I care about, which is Section 113 part D of Dodd-Frank. And what this in essence says is that you will have an annual review of the SIFI designation, right, that there is a mandate under Dodd-Frank that no less than annually there will be an undertaking by FSOC to review those SIFI designations for non-bank financial institutions. You, as well as Secretary Lew, have both pledged that you are committed to that process, and I assume that remains the case.

The question I have is what metrics are you going to use for that annual review?

Mrs. YELLEN. I have not been involved in that. It hasn't come to FSOC yet and I am not certain of exactly what they will look at. I would assume that they would look at some of the same metrics and whether or not those have changed, that they used in deciding to designate those firms—

Mr. MCHENRY. I would appreciate it if you would follow up with me on this to give us an understanding of what that is.

The 4-year anniversary of Dodd-Frank is next week, and for us to not have an annual review process set up on the SIFI designation is concerning.

Related to that, you also have, under Section 165, the opportunity for remedies under the—after the CCAR process and the living will process, to seek remedies from firms. Both Governor Tarullo and former Governor Stein have told us that the CCAR process is moving from a wartime setting to more of a peacetime setting and there is a bit of tension between customization and standardization under the CCAR metrics.

So once you go through the CCAR process, once you get the review of this stuff, at the end I am sure you and your staff pore over the way to improve it for the next time. Are there some key takeaways that we can understand from the CCAR process?

Mrs. YELLEN. I'm sorry, you are talking about CCAR? You mentioned living wills as well.

Mr. MCHENRY. I'm sorry. My next question is about living wills, so I—yes, I put those two together.

Mrs. YELLEN. You are talking about the CCAR process?

Mr. MCHENRY. My question is about the CCAR process. My next question, to give you a heads up, is on living wills.

Mrs. YELLEN. Okay.

I think we have learned a lot from the CCAR process and we have refined our own modeling techniques and I think worked with the firms to clarify over time what our expectations are for their risk management modeling capabilities, and I think we have had good back and forth that is leading to improvements in how we conduct this.

Mr. MCHENRY. Okay.

About living wills, you said yesterday in front of the Senate—I know one Senator asked you this question rather directly and apparently wasn't satisfied with your answer about living wills—that you continue to work to improve living wills. Can you give us greater clarity on that? Because you judge whether or not living wills are credible, right? And if you are continuing to work with firms on their living wills, does that mean that they are currently not credible?

Mrs. YELLEN. Well, we do not make some annual determination as to whether or not they are credible. We may make a determination. We are not required by the statute, but the FDIC and the Fed can make a determination at some point that the living will is not credible, of a particular firm, or that it would not facilitate resolution.

My own understanding of the process is that this is a difficult and new responsibility for the banking organizations and for us, and that we would have iterations back and forth with the firms in trying to set out a set of expectations, look at what they are provided, give feedback, and set out a set of expectations we want to see.

Mr. MCHENRY. So if the living wills are accepted, then therefore they are credible.

Mrs. YELLEN. Accepted does not necessarily mean they are credible. We can determine under Dodd-Frank—

Mr. MCHENRY. That is disconcerting because if living wills are intended for that purpose, to help unwind these firms and be a road map for unwinding these firms in the advent of a cataclysmic event, then they should be credible.

Mrs. YELLEN. We will work with the FDIC to give these firms feedback on what we want to see them do to facilitate resolution. And of course, that is the objective. But although we are close, we have not even finalized feedback to the firms on their second round submissions.

Chairman HENSARLING. The time of the gentlemen has expired.

The Chair now recognizes the gentleman from Texas, Mr. Green, ranking member of our Oversight and Investigations Subcommittee.

Mr. GREEN. Thank you, Mr. Chairman.

Good morning, Madam Chair, and welcome again to the committee. I have three questions, each of which could easily consume 5 minutes of your time. And I do not believe that I will get through all three but I will ask, if possible, that you give a laconic answer to each.

The first, you have used the term “unusual headwinds,” and I have noted that the term “fiscal policies” has been associated with this. Would you, as tersely as possible, explain some of the unusual headwinds that we have faced or are facing?

Mrs. YELLEN. Tight fiscal policy is one of them. Although there was a stimulus for a number of years, in more recent years fiscal policy, in addressing deficits and attempting to reduce deficits, has created drag on economic growth. And that is unusual in times like these.

In addition, the system of housing finance and the willingness of residential mortgage lenders to provide credit, the standards should have escalated, they have escalated, but it has now become the case that any borrower without a pretty pristine credit rating finds it awfully hard to get a mortgage. And I think that there are a number of reasons for it coming out of the crisis, but I think that is a headwind.

So credit availability for some purposes, I think is diminished relative to historical norms.

Coming out of this crisis, we also see that households have unusually depressed expectations about their own future income gains, and I think that weighs on their feelings about their own household finances and is holding back consumer spending.

So those are some of the things that I would see as headwinds from the crisis. In addition, productivity growth has really been quite slow for a number of years.

Mr. GREEN. I am going to abandon my other two questions because I now have a follow-up to this one.

Mrs. YELLEN. Okay.

Mr. GREEN. You indicated that these fiscal policies are unusual for times such as these. What would you expect usual fiscal policies to be for times such as these?

Mrs. YELLEN. I think historically, when the economy has been weak, fiscal policy has, at least on average, provided greater stimulus than it has over the last several years.

And I understand there are reasons that Congress has chosen this course. But simply what I would see as a factual matter, the degree of drag from fiscal policy in a high unemployment situation has been unusual.

Mr. GREEN. And could you kindly give an example or two of the kinds of fiscal policies that historically have been employed in times such as these?

Mrs. YELLEN. Typically, there would be tax cuts and increases in spending that would allow automatic stabilizers to go into effect in circumstances where unemployment was high.

It has been very rare—we haven't, in the post-war period, had really a recession that has been as long and as deep as this one, so it has been an unusual period.

Mr. GREEN. Thank you.

I will take one more question and just ask you about indicators. We have leading indicators, lagging indicators, and, of course, we have coincidental indicators.

I try to follow these, but what I would like from you is just as you look at them in general, could you give me just an assessment of where these indicators seem to indicate we are going?

Mrs. YELLEN. I see most indicators that I look at in the economy as suggesting improvement. I look at things like industrial production, the labor market, auto sales. What is happening in the housing sector, that may be an exception that we don't see a lot of improvement there.

But most measures of spending in the economy, consumer and business attitudes, through all of those I think we see positive signs.

Mr. GREEN. Thank you very much.

Thank you, Mr. Chairman, I yield back.

Chairman HENSARLING. The Chair now recognizes the gentleman from Wisconsin, Mr. Duffy, vice chairman of our Financial Institutions Subcommittee.

Mr. DUFFY. Thank you, Mr. Chairman.

And, Madam Chair, thank you for being here. I want to commend you for the last time you were here, staying for as much time as we would need to have everyone on the committee ask you questions. I thought that was fantastic. I was hoping that was going to be a continual policy, but maybe it was not as pleasurable for you as it was for us.

But I appreciate you being here today.

On June 18th Representative Perlmutter and I, along with 84 of our colleagues, wrote a letter to the President asking that he appoint someone to the Federal Reserve with banking experience. I would ask that that letter be included in the record.

Chairman HENSARLING. Without objection, it is so ordered.

Mr. DUFFY. And I know yesterday Senator Vitter asked you about this very issue, and I think you indicated your support that we—you would support having someone with banking experience, community banking experience, on the Fed Board. Is that correct?

Mrs. YELLEN. Yes, I would.

Mr. DUFFY. And it is fair to say that your role has expanded. Traditionally you were dealing with monetary policy, but through

Dodd-Frank and the Fed's own action you have had an increased role on the regulatory side, correct?

Mrs. YELLEN. Yes.

Mr. DUFFY. And, we are familiar with your dual mandate of maximum employment and price stability. Is it almost fair to say there is an unwritten third mandate that would bring us to protecting the country from systemic risk?

Mrs. YELLEN. I think that is fair to say for the Federal Reserve, although it is not something that applies specifically to monetary policy, but we have a number of different tools, and I interpret that as an unwritten third mandate for the Federal Reserve.

Mr. DUFFY. Right. And kind of talking about that, right, there is—you have the monetary policy side and you also have the regulatory side. And just on the good government side for us, we get concerned, not about your blackout period during the FOMC meetings; we agree that you should have the blackout period.

We do get concerned in Congress when you take the blackout period that applies to monetary policy and when we ask you to come in and talk about the regulatory side, you use the argument on monetary policy and the blackout and use it for—

Mrs. YELLEN. We have no blackout period that applies to anything other than monetary policy in the economy. There is no blackout period with respect to supervision and regulation. And, it is conceivable that you asked someone to testify and they had a problem—I don't know what specifically you have in mind here, but a—

Mr. DUFFY. Yes. I—

Mrs. YELLEN. —blackout period does not apply to supervision and regulation.

Mr. DUFFY. Thank you, and I would agree with you. It does not apply.

But I would just reference, we had a December 2012 meeting—and there are a number of examples, but in December 2012 we wanted to have a hearing on Volcker and we didn't get a witness because the blackout period was cited.

So just if you would take a look at that, we want to make sure that there is a blackout period that does not apply to the regulatory side.

Mrs. YELLEN. It does not apply.

Mr. DUFFY. Okay.

If you haven't noticed, this side of the aisle gets very concerned about the debt. I think that is why the chairman at our hearings will put up the fact that we have an almost \$17.6 trillion debt. And by way of your accommodative policy, quantitative easing, we have had historically low interest rates, you would agree.

Today I think to the Budget Committee we will pay \$227 billion a year to service our debt. And you would agree we pay historic low interest rates on that debt, correct?

Mrs. YELLEN. Yes.

Mr. DUFFY. Have you taken a look at what it would cost to service the debt if interest rates go to historic norms?

Mrs. YELLEN. I don't have those calculations in front of me, but certainly the Congress should be thinking about the fact that over

time, as the economy recovers, interest rates will move back up to more normal levels.

Mr. DUFFY. And the cost to service that debt does not stay at \$230 billion. Even if we were able to stop that clock from turning and we were able to hold it at \$17.6 trillion, the cost to service that debt is going to increase dramatically when interest rates go up, correct?

Mrs. YELLEN. It will certainly increase.

Mr. DUFFY. So, there is not a correlation—

Mrs. YELLEN. Yes. Higher interest rates will increase the cost of servicing that debt.

Mr. DUFFY. Right.

And some of the projections I have seen, if the debt stays the same it brings us to around \$500 billion, \$550 billion a year, an additional \$300 billion that doesn't go to whether we are building our defense, whether we are using that money for food stamps, the social good of the country.

And I think it is important that the country understand that there is a consequence for the spending binge that this town has gone on and that we will pay it as rates go up and it will have a significant impact on our budget in our out years, which might start, as you have indicated, next year.

Thank you for your testimony. Thank you for your honesty in actually answering our questions. I appreciate that. It is very nice and refreshing.

With that, I yield back.

Mrs. YELLEN. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Chairman.

Madam Chair, thank you for being here.

I want to talk about unemployment because that continues to be a major concern of mine and, frankly, a major concern in the district that I represent. Obviously, the macroeconomic situation is thriving, but when it comes to unemployment, particularly for minorities, it is still almost in recession levels.

And I am wondering if you think that is some kind of a structural unemployment issue, or do you believe in the, as it is called, Luddite, is that how you—

Mrs. YELLEN. Luddite?

Mr. CLEAVER. Yes.

Mrs. YELLEN. I think the labor market is afflicted both by weakness in the overall economy, and so things should broadly improve as the economy strengthens and the unemployment rate and other broader indicators come down. But on top of that, there are also structural factors that are currently, and have for a long time been, creating problems for many, many American families.

Luddite tends to refer to technology, and we have seen a widening of the income distribution, the wage distribution in the United States, going back to the mid-1980s. Economists have been debating the causes, and they do see technological changes that have favored skilled workers as being one of the causes of a wid-

ening income distribution. To some extent, globalization probably also plays a role and there may be other factors.

But I think when we think about all of the pressures that middle- and lower-income families in the United States are facing, some of them come from the generally weak economy, and I think that is the part the Federal Reserve can contribute to. But there are deeper adverse trends at work on top of that, and perhaps they have even been exacerbated during this downturn.

Mr. CLEAVER. Some economists seem to believe that as technology expands, it will create more jobs than it will destroy. Do you embrace that economic theory?

Mrs. YELLEN. I think the total number of jobs in the economy is not just determined by technology; it is determined by macroeconomic policy. I wouldn't believe people have for centuries worried that advancing technology, for example, would destroy jobs and people would become unemployed just because technology enables more to be produced with fewer workers.

Time and time again, we have seen that is not the case, that even with productivity growth and improving technology we can have jobs with appropriate policy for people who want to work. So I don't endorse that.

But patterns of technological change can favor some groups in the labor market and disfavor other groups in the labor market. And many economists have been writing about the fact that so-called skill-biased technical change—in part, the use of computers and new information technologies—has raised the productivity in the income-earning capacity of more-skilled workers and has worked to the disadvantage of less-skilled workers.

So technological changes can produce winners and losers, at least in a relative sense.

Mr. CLEAVER. Yes. The latter—in restaurants, for example, I have seen that. I have said here in the committee before, I went to a restaurant in Cape Girardeau, Missouri—I am from Missouri—where you order your meal from the table through a computer, which means that there is no waitress or waiter with that job now.

That still doesn't answer, for me at least, the question about a cure for the unemployment levels that are so high in urban centers, even if you are a college graduate. If you are an African-American or a Latino college graduate you are still going to have a difficult time getting a job.

Now, there may be some sociological—thank you, Mr. Chairman.

Mrs. YELLEN. I hope that will improve in a stronger economy.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Indiana, Mr. Stutzman.

Mr. STUTZMAN. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for being here today and for your testimony. I would like to talk a little bit about the dual mandate. And your comments and your testimony are that you are making progress towards the Federal Reserve's objectives of maximum employment and price stability.

One of the things that we are starting to see in northeast Indiana is there is demand for labor, and even some wage increase.

One of the concerns that I have is in the long term, how do you—I believe that the dual mandate is conflicting and would like to hear some of your thoughts on how do you decide when is the right time to increase interest rates? How do we grow the economy but keep inflation in check?

One of the things that I do believe is that the dollar is a unit of measure. It is something that we use to measure a current value. Shouldn't it be stable just like any other measurement, whether it is a foot, hour, pound? Shouldn't it be stable like those measurements?

Mrs. YELLEN. Almost every central bank that has an explicit inflation target has chosen a low positive number as their objective for inflation rather than zero, and there are a number of reasons for that.

One reason is that if zero is the target, one is bound to have episodes of deflation, which can be associated with very highly adverse outcomes, which almost every country wants to avoid.

Mr. STUTZMAN. So let me get to inflation. The Fed's favorite measurement of inflation is the PCE deflator. Is that right?

Mrs. YELLEN. Yes.

Mr. STUTZMAN. Okay. Is that a leading coincident or is it a lagging indicator?

Mrs. YELLEN. I am not sure I quite understand what that means.

Mr. STUTZMAN. How do you gather information? What information are you gathering to then declare that we are seeing inflationary pressures?

Mrs. YELLEN. The PCE price index is issued. Data on it comes out every single month that is produced by the Bureau of Economic Analysis. So we have monthly data on it.

We are measuring, and the Bureau of Labor statistics is going out and collecting data on a wide range of goods and services that they incorporate into the consumer price index. So we have pretty good real-time data on prices in the economy.

Mr. STUTZMAN. Is wage growth that part of the calculation?

Mrs. YELLEN. It is not explicitly part of inflation, but in trying to forecast inflationary pressures, one question is, what is the price level or inflation now? Another question is, what is its likely trajectory over time?

And in trying to understand and forecast where is inflation going—

Mr. STUTZMAN. How much are wage increases calculated into inflation?

Mrs. YELLEN. It doesn't directly enter into inflation, but the prices of some goods, and particularly services, depend very heavily on the cost of labor. So it is an important—

Mr. STUTZMAN. So would the cost of—

Mrs. YELLEN. —influence on the rate of inflation.

Mr. STUTZMAN. So we are trying to get wage increases. Is that correct?

Mrs. YELLEN. We are trying to hold stable, or to have 2 percent growth in an index of consumer—

Mr. STUTZMAN. But why wouldn't we want unlimited wage increases? Why wouldn't we let the market drive wage increases?

Mrs. YELLEN. We are letting the market drive wage increases.

Mr. STUTZMAN. But if we—

Mrs. YELLEN. We don't have a target for wage increases. We have to target for increases in the prices—

Mr. STUTZMAN. Am I not understanding that wage increases would then factor into inflationary pressure, and then you would take that into calculation for interest rates?

Mrs. YELLEN. We have an objective for a price index that is a broad measure of the cost of a basket of consumer goods to the typical American consumer, and we are trying to achieve a longer-term objective of 2 percent for that. Looking at wage behavior, we don't have a target for wage increases, but wage increases can be a determinant of inflation of goods and services and have predictive power for inflation in the future.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Minnesota, Mr. Ellison.

Mr. ELLISON. I thank the chairman and the ranking member.

Good morning, ma'am. It is good to see you again.

Just with regard to this issue of wage increases and the implication that they could be a driver of inflation, could you speak on the relationship between increases in wages and productivity? And if you have an increase in work productivity, you could also have increases in wages that are not inflationary. Could you comment on that?

Mrs. YELLEN. That is certainly true. And often, instead of looking at just wages, we would look at a different measure called "unit labor costs," which compounds together both productivity or output per hour and wage or compensation costs.

And that is a broader measure—taking account of productivity of what does it cost or how is the cost changing over time, of what firms need to pay basically to produce a certain amount of output. So certainly productivity is a key factor and not only wages.

Over the last several years, what we have seen is that real wages, or wages in real terms, are not growing as fast as productivity.

Mr. ELLISON. Thank you for making that point. I was going to ask you, but you anticipated my question, which is that we have room for wage increases, given our rate of productivity in this economy. And I would argue that wages are depressed and sometimes you need government to intervene in labor markets through—in minimum wage in order to catch up because there is no equality of bargaining power, given the decline of union representation in our country.

Anyway, I have to ask you a question on behalf of my constituents. I represent a very large percentage of people whose roots are in Somalia, and I am very proud to represent that community.

One of the problems we have been having is that because of certain regulations like the PATRIOT Act, the Bank Secrecy Act, and others, that the regulatory—I hate to use the term "regulatory burden" because that sounds so Republican, but the regulatory burden, okay—it is my move on bipartisanship today—is such that a lot of the banks that facilitate these money-wiring transfers are opting out of that market.

Usually we are not talking about them remitting a lot of money, and the banks tell me they do it but it is just expensive and the liability associated with making a mistake is pretty high when it comes to having to do all the documentation of knowing your customer.

What can be done? Because we have hardworking people who are trying to send money back home to their families, and our government correctly is trying to stop terrorism financing, which I completely support. But in so doing, a lot of folks are very hard-pressed to get money back home. Can you speak to this issue?

Mrs. YELLEN. This is an issue that the Federal Reserve has been aware of and it has been discussed, I know, on an interagency basis for a number of years. It is certainly a legitimate need to make remittances to Somalia, and I think part of the issue is with the need to also manage money-laundering and terrorist-financing risks.

This is a hard issue. I would say the Federal Reserve—I think it is important to understand, the Federal Reserve absolutely does not prohibit businesses from providing remittances to Somalia. To the extent that the banks we supervise are involved with customers who are in this business, we would supervise to make sure that they are abiding with BSA/AML requirements. But we are not prohibiting banks from serving the needs of these customers.

Now, it is a decision that they make whether or not they want to take these risks. And, I know—and this is not the only area where this comes up—some firms may be reluctant to undertake those risks.

Mr. ELLISON. Forgive me, Madam Chair, because my time is running short, but I think that one of the ways to solve this problem is for some developed governments like ours to engage with the Somali government, which seems to be getting its feet on the ground, and help them stand up their central banking system so that it can meet international standards. I think this would be money well spent to help them get their processes in order because every penny that Somali Americans send to their families is a penny we don't have to send in foreign aid. But we are not going to stand by and let people starve, so we will step in when we need to, and remittances take a lot of pressure off.

Thank you very much. I yield back.

Chairman HENSARLING. The time of the gentleman has expired. And the Chair would note for the record that I am aware of many accusations against my friend from Minnesota, but sounding like a Republican is not one of them.

The Chair now recognizes the gentlelady from Minnesota, Mrs. Bachmann, for 5 minutes.

Mrs. BACHMANN. Thank you, Mr. Chairman.

Continuing on with the Minnesota line of questioning here in the Financial Services Committee, my questions for you—and thank you again for coming before this committee, Chair Yellen, today—as of July 9, 2014, my understanding is that the bank reserves at the Federal Reserve are something close to \$2.8 trillion, and I am wondering if you could explain to the committee why is this number so high, the amount of reserves that are on hand at the Federal Reserve?

Does this show that businesses are leery of investing in the U.S. economy? And if these reserves enter the economy too quickly, what is your assessment on the impact of inflation if this \$2.8 trillion adds to our money supply too quickly? And what, if anything, would the Federal Reserve do to stop this inflation?

Mrs. YELLEN. The reason that bank reserves are so high is because we are creating those reserves when we purchased longer-term assets. So we have been involved in a program of purchasing longer-term treasury and mortgage agency mortgage-backed securities in order to provide financial conditions that are appropriate to stimulate the recovery, and when we purchased those assets we create those reserves. Any individual bank can decide what they want their deposits to be with the Federal Reserve, but in the aggregate that total is determined by the Federal Reserve and not the banking system.

Now, as the economy recovers and we come closer to our goals of maximum employment and our 2 percent longer-run objective, it will be appropriate for the Fed to tighten monetary policy to avoid inflation picking up to undesirable levels. And we can do that with a balance sheet that is as large as we have with reserves at these high levels, and we have been discussing the exact procedures we will use when the time comes to normalize policy.

We have had a number of discussions in recent meetings, and the minutes of our last meeting, as I referred to in my testimony, give some details of our thinking. We hope to set it out in detail before the end of the year.

But we will move to raise short-term interest rates when the time is appropriate. We will use tools like our ability to pay interest on excess reserves and a host of subsidiary tools that we can use to move up the general level of short-term interest rates, and that is how we will tighten monetary policy.

Eventually the committee sees it as appropriate to operate with a much smaller balance sheet and smaller reserves than we have now. Looking into the distant future, I think it is quite reasonable to predict that our balance sheet will eventually shrink in size, but only much later in the process of normalizing policy.

Mrs. BACHMANN. You had touched on the issue of recovery. We have been in recovery for approximately 6 years. That seems like historically a very long period of time, an unusually long period of time for the United States economy to be in a so-called period of recovery.

Normally, when we have a recession or if we have a backtracking in our economy, usually we see almost like a bungee cord effect. We see the economy grow at a rapid pace. We haven't seen that for the last 6 years.

Can you tell this committee why haven't we seen the—what—historically we would see robust recoveries, but we do not see them now. Why, in your opinion, has that happened?

Mrs. YELLEN. I think because this downturn was caused by a financial crisis, and the study of financial crises around the world suggests that when they occur, the downturns that follow them and the recoveries take a very long time and they have a pronounced effect on the economy. The typical post-war recession—

Mrs. BACHMANN. But so much of the recoveries— isn't it true that so many of the recoveries, usually the further down you go you see a quicker move up in recovery? Why aren't we seeing that?

Mrs. YELLEN. I think that is when it is not caused by a financial crisis. For example—

Mrs. BACHMANN. What makes it different?

Mrs. YELLEN. For example in 1981 we had a tightening of monetary policy because inflation had risen to unacceptably high levels. When inflation came down, there was the ability to then step on the gas with respect to monetary policy, and intra-sensitive sectors like housing that had been suppressed, immediately began to grow and bring the economy back. And of course, this is a very different episode.

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from Washington, Mr. Heck.

Mr. HECK. Thank you, Mr. Chairman.

Chair Yellen, thanks very much for your presence today. I want to follow up on a question that Congresswoman Velazquez asked you about what you highlighted in your own testimony, your increasing concern about reach for yield activity. I effectively have concluded you placed it kind of on your watch list and your amber light is on.

The follow up question is this: Can you, without speaking to broad policy, nonetheless give an example of what it would look like in order for you to take that from your amber light to your red light? And secondly, an example—again, not the broad policy—about what kind of an action step you might take to deal with it. Is that clear?

Mrs. YELLEN. Yes.

I would look at broad measures of leverage and the extent of maturity transformation and credit growth and asset prices generally—broad measures—if I saw a leverage growing rapidly in the economy, asset prices rising to levels that were—

Mr. HECK. Got it.

Mrs. YELLEN. —outside of historic valuations.

Mr. HECK. And what is an example of what you might then do?

Mrs. YELLEN. An important thing that we have done is to take steps to make the financial system stronger. All the steps coming out of Dodd-Frank to increase the quantity and quality of capital, to put in place tougher leverage standards—all the different things—liquidity rules—I won't go through the full list of them, but let me just say these do two things.

First of all, if we were to have an unwinding of imbalances that occurred, it means that financial institutions and the financial sector would be in a much stronger position to withstand the shocks and to go on meeting the credit needs of the economy than they were in the run-up to this crisis.

But second of all, all of those—the collection of rules we have put into effect and are now completing, we have to work our way through them, will work to restrain the build-up of these imbalances. For example, we will expect to put in place, are likely to put in place, measures that will require extra capital holdings against

short-term wholesale financing. That discourages the build-up of leverage and overnight borrow that creates these risks.

Mr. HECK. I got it. Thank you. Financial institutions should be put on notice as of now.

I want to ask a question about the output gap, the difference between actual economic activity and that which would be sustaining at maximum employment and peak industrial output.

The IMF puts America's output gap at \$720 billion a year. The CBO puts it at a trillion. What is your personal opinion of about what it is?

Mrs. YELLEN. We don't have any official—

Mr. HECK. I know. I asked your personal opinion, Madam Chair.

Mrs. YELLEN. Okay. So can I put it in a slightly different metric?

Mr. HECK. You will anyway, so please go ahead.

Mrs. YELLEN. The unemployment rate is 6.1 percent. Members of our participants in the FOMC would see a normal, longer-term unemployment rate in the range of 5.2 to 5.5 percent. So, taking the lower end of that range is say a .9 percent gap in terms of the unemployment rate.

A simple historical relationship that has fit pretty well—this is just back of the envelope; it is not precise—called Okun's Law, would say that—

Mr. HECK. Okun's?

Mrs. YELLEN. Okun's law, after Arthur Okun, would say that the output gap tends to be on the order of two or 2½ times that in terms of a percentage of GDP, so I think that gets us in the range of something like 2 or a little bit over 2 percent in terms of an output gap. But I want to emphasize, that is a back of the envelope calculation I am trying at your request rather than any official. But that is probably in line with what you said, but I am not sure.

Mr. HECK. Thank you, Madam Chair.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from South Carolina, Mr. Mulvaney.

Mr. MULVANEY. Thank you.

Madam Chair, last time you were here you and I talked briefly about some discussions between Treasury and the Fed in the fall of 2013 regarding the debt ceiling, the possible prioritization of payments. I sent you several questions for the record in follow up to that and I received a response last week, which I appreciate.

And I have to ask, just for the record, ma'am, do you actually read those or are they done by staff and you just sign them?

Mrs. YELLEN. I absolutely read them.

Mr. MULVANEY. Thank you. You didn't answer a lot of my questions. I had asked for names of specific folks who were involved in those discussions.

I asked—for example, you had invoked a certain privilege. You said you couldn't tell Congress what you had talked about because you have an agency relationship with the New York Fed and you couldn't tell us what you talked to them about.

And I asked you for a specific legal justification for that privilege and you didn't answer that. So without wasting a lot of the time to actually get the answers, which I will do in a follow-up QFR

today, do you think it is appropriate not to answer congressional inquiries on QFRs?

Mrs. YELLEN. I think we have answered to the best of our ability the questions you posed.

Mr. MULVANEY. Good. And I will give you a chance in the follow-up to point out, in the answers you gave, where you are actually answering those questions.

Let's get to the substance of the answers, because you gave me a very interesting answer, one that I have heard from members of the Administration several times, where you distinguish between a default on debt and a default on obligations. It is a term that has changed over the course of the discussion regarding the debt ceiling.

It used to be that not raising the debt ceiling would supposedly lead to a default on the debt and the members of the Administration changed that language to use the term default on our obligations.

And you continued that verbiage in your response where you said, "A failure to pay Social Security benefits, contractors, or Armed Forces, et cetera, and other obligations as they come due will, in fact, be and will be viewed publicly as a default by the United States on its obligations."

And I won't go in now to Social Security benefits, contractors, Armed Forces. I will ask you this: We spent \$1.9 million last year on lifestyle training for Senate staffers. Would not doing that be deemed a default by the United States on its obligations?

Mrs. YELLEN. I really can't comment on a specific like that. I would simply say that the government has a wide range of obligations to contractors, to Social Security recipients—

Mr. MULVANEY. They do. Would you agree with me that some are more important than others?

Mrs. YELLEN. That is not my judgment to make. That is up to Treasury and to the Congress to decide, not me.

Mr. MULVANEY. But I guess if you are taking the position that not paying any of the obligations is a default, then not paying the \$300,000 we spent to encourage Americans to eat caviar last year would be a default?

Mrs. YELLEN. When the government has purchased goods and services and is presented with a bill that has come due for those goods and services and it fails to pay bills when they come due—

Mr. MULVANEY. Fair enough. But not paying things that haven't yet incurred and become due would not be a default, then, in your definition. So if we have an expense that we are going to incur next month but we do not, and therefore it does not come due, it is not a default, using your definition.

Mrs. YELLEN. The Treasury is making payments—

Mr. MULVANEY. Treasury.

Let's move on to the other topic I want to talk about, because we received a letter last week or late last month from Sheila Bair, former head of the FDIC, regarding the new reverse repo facility at the Fed. She had raised some concerns about it. I know I think the President of the New York Fed and also the Boston Fed raised some questions about it in a recent Wall Street Journal blog.

Two questions, as quickly as I can. Number one, why did you not come to Congress to seek authority to create that facility?

Mrs. YELLEN. This is a repurchase agreement, which is a standard tool that we use in open market operations. It has long been—we have long had—

Mr. MULVANEY. True, but this is a dramatic expansion, which is why you are doing it, I think correctly, on a test basis, correct? This is a new facility for you. It may be a reinvention of something that you have used or a re-characterization, but it is a new facility.

So I guess the answer is you didn't think you needed authority to come to Congress?

Mrs. YELLEN. We do have authority under the Federal Reserve Act to purchase and sell securities in the open market and in conduct of monetary policy, and I believe it falls under standing authority that the Federal Reserve has and we will use this facility only for the purpose of implementing monetary policy.

Mr. MULVANEY. Fair enough. And let me ask you this: Do you share Ms. Bair's concern and that expressed by the Presidents of the New York and Boston Fed that perhaps this facility needs to be limited in its size and application?

Mrs. YELLEN. We have discussed and are aware of the potential—if it is available on very large scale and can be expanded and contracted very quickly—to create financial stability risks. And we absolutely intend to make sure that we address those risks.

Mr. MULVANEY. Thank you, ma'am.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Nevada, Mr. Horsford.

Mr. HORSFORD. Thank you, Mr. Chairman, and Ranking Member Waters.

And thank you, Chair Yellen, for being here today. It has been a very informative session on the state of the U.S. economy.

An area that I wanted to explore from the monetary policy report is the issue of the slow recovery of housing and the housing market. I am from Nevada. We have the most unstable housing market in the country. About a third of our homeowners are upside-down, negative equity, some of them as high as 50 percent or more.

And so in the report, it indicates that while there was a slight increase in values and an uptick in the housing market, we are beginning to see a decline or a slowdown in that. And so I wanted to ask, what forces are contributing to this lackluster housing recovery?

Mrs. YELLEN. Housing did seem to be recovering throughout most of the recovery, and it looked like it was on a reasonably solid course, recovering from a very low level. And then we saw essentially a cessation of progress when mortgage rates rose significantly last year.

I think my expectation was that would be a temporary setback for housing, and with mortgage rates higher but still at very low levels, and with a period of very weak household formation, I expected that we would see a rebound by now, a pickup in the housing sector.

And frankly, it continues to be sluggish. I can't give you a precise reason why that has occurred. We are certainly aware of the fact

that mortgage credit remains very, very tight, as I have said several times this morning, for a wide range of borrowers. And that may be part of it.

We also hear about some supply constraints that builders face. Perhaps that is contributing. But I have to say that I am somewhat surprised.

Mr. HORSFORD. So what more do you think the Fed can do to help stimulate recovery in the housing sector, both for those homeowners who are upside-down in the values, as well as to help new entrants be able to qualify for homes?

Mrs. YELLEN. Housing prices are continuing to increase, and they have increased substantially, and I think particularly in the markets that saw the worst booms and busts.

I know particularly in Nevada, there is a very large fraction of homeowners who are underwater, but I think if you look at the aggregate numbers, just the increase in house prices we have seen—and I think that is in part reflecting our accommodative monetary policy—many fewer borrowers are underwater. The numbers have diminished substantially.

And, I know the Las Vegas area particularly is one of the most hard-hit and still has about the highest numbers on this. But I really think that our policy is helping, and I think eventually we will see greater progress in the housing market.

But, there are many impediments that servicers face in the aftermath of the problems and the foreclosure problems we have had during the crisis and things have not yet settled out there.

Mr. HORSFORD. Definitely.

At yesterday's Senate Banking Committee hearing, you stated that, "Too many Americans remain unemployed, inflation remains below our longer-run objective, and not all of the necessary financial reform initiatives have been completed."

What benchmarks are you looking at when determining if a full recovery has taken place? And what does a full recovery look like, from your perspective?

Mrs. YELLEN. We have emphasized that at this stage we are not looking at just one or two statistics and assessing the labor market. We are taking into account many different measures of performance.

Probably the unemployment rate is the single best indicator, and it has come down to 6.1 percent, which is really notable progress, and broader indicators that include marginally attached workers, discouraged workers, and those with involuntary unemployment, part-time employment, those have come down as well. But that is not at levels that most members of our committee would consider full employment.

We are looking at the extent of long-term unemployment. We are looking to see if there are groups that have dropped out of the labor force that may indicate why labor force participation has declined so much. I am hopeful that some of that will reverse as the economy strengthens.

We are looking at measures of hiring and quits that remain below normal and suggest not a normal labor market at this point.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Florida, Mr. Ross.

Mr. ROSS. Thank you, Mr. Chairman.

Chair Yellen, thank you very much for being here. In your role, you are balancing the metaphorical gold standard of our currency, and I know that can be very difficult.

In your opening statement, with regard to the monetary policy, it says that the committee seeks to explain its monetary policy decisions to the public as clearly as possible. In trying to keep it as clear as possible for my constituency back home, especially those who are on fixed incomes, what hope or what prognosis can you give, as clearly as possible, to those on fixed incomes?

Is this a positive? Is there an opportunity that they are going to see greater returns on their investments, or are they going to have to see eating into principal? Fixed-income people in central Florida—there are a lot of them.

Mrs. YELLEN. I know it has been a really hard time for savers who are trying to exist on the returns you would earn on a safe investment, like a savings account. And that has been a heavy toll for those households.

Mr. ROSS. It has led to abbreviated retirements and return to the workforce. That might be one of the reasons why unemployment has gone down.

Mrs. YELLEN. But they can be hopeful that as the economy recovers, and interest rates in a sense, they are not just set arbitrarily; they reflect fundamental economic forces. And the fundamental—

Mr. ROSS. That you control, fortunately—or unfortunately, depending on who you are talking to. But yes, you are right.

Mrs. YELLEN. It is a lot to save, and there is not much demand for those savings in the form of investment. And that means that—

Mr. ROSS. As you discontinue the buyback, I think that should hopefully put some more pressure on upward rates for savings. Wouldn't you agree?

Mrs. YELLEN. As the economy recovers and we begin to normalize policy, eventually interest rates will go up. So if the recovery continues, I would envision rising interest rates over time. And we have tried to spell out what we envision.

Mr. ROSS. Thank you.

Let's talk briefly about SIFIs, because the last time you were here we discussed this. And specifically, I think you would agree that the fewer systemically important financial institutions that we have, the better off we are.

And in fact, we have now have some insurance companies that are being designated SIFIs. My big concern is that they should be designated as a SIFI as a last resort, when nothing else is out there to help them. I think you would agree with that.

Mrs. YELLEN. Well, sure. I think there has to be clear evidence that—

Mr. ROSS. But when they are at that level, shouldn't we allow for some opportunity for self-correction, or an opportunity so that they can keep from being designated as a SIFI? In other words, these entities don't know they are a SIFI until it is too late.

Wouldn't you agree that there should be more transparency, more involvement, whether it be some role for the Fed to come in there and keep them from being a SIFI? And wouldn't that send

a message to keep others from also ever being designated as that, taking appropriate action?

Mrs. YELLEN. I think the FSOC has tried to make clear what the criteria are,—

Mr. ROSS. I would differ with you on that—

Mrs. YELLEN. —that they will take into account, and I don't really think it was any surprise to these institutions that they are on the list. And of course, after they are designated, if they wanted to change their structure substantially enough, that situation could potentially change.

Mr. ROSS. Quickly, I see that you have just commissioned Tom Sullivan to assist in capital standards, and I think that is a very good move. I want to make sure that we are adequately representing this industry, this insurance industry, especially with regard to international capital standards.

And that has me concerned because I think you have testified yesterday that maybe if—even if there are international standards, that we may not abide by them. And that—

Mrs. YELLEN. What I said was that if international standards are agreed to, nothing becomes—

Mr. ROSS. We are not compelled to do it.

Mrs. YELLEN. —nothing happens in the United States unless we go through a full range of—

Mr. ROSS. We are still going to be at the table, though, with regard to the negotiation of those standards, correct?

Mrs. YELLEN. We are sitting at the table, and state insurance commissioners are there with us. We—

Mr. ROSS. Good.

Mrs. YELLEN. —consult with the Federal Insurance Office. And as you noted, we are adding—

Mr. ROSS. I just have one little quick question, one last question. Just recently this month the President was speaking and he said, "Right now, if you are one of the big banks, profit center is the trading desk, and you can generate a huge amount of bonuses by making some big bets. You will be rewarded on the upside. That is going to require some further reforms," the President said. "That is going to require us taking additional—looking at additional steps that we can take."

Have you talked to the President about further reforms?

Mrs. YELLEN. No.

Mr. ROSS. Okay. Do you think that Dodd-Frank is appropriate in terms of its reforms that have been imposed on the market so far?

Mrs. YELLEN. I am not certain what he is referring to there.

Mr. ROSS. Okay. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from California, Mr. Royce, chairman of the House Foreign Affairs Committee.

Mr. ROYCE. Chair Yellen, how are you?

Mrs. YELLEN. Good, thank you.

Mr. ROYCE. I am glad you are with us again. I want to encourage you on a theme that you spoke to recently, and that is this question of the unsustainable path, as you mentioned, of entitlement spending that we have known about for decades.

There is a new Congressional Budget Office report that just came out and it releases new numbers. It says that the long-term debt will equal 100 percent of the overall economy within 25 years.

I think this goes to your point that, in your words, this is a critical issue facing the country. I talked to Ben Bernanke about this and his predecessor, Alan Greenspan. Isn't there a way to ring that bell a little louder so that people understand what this means for the next generation? And I will ask you that and give you the floor here to amplify that message if you would like.

Mrs. YELLEN. I believe this is a critical problem that Congress should really try very hard to address in the Administration. It is one we have known about for decades. There is nothing fundamentally new here. We have just come closer to the problem without taking the necessary steps.

I think it relates to trends in health care costs, combined with an aging population. That is certainly not news. There are many organizations that have been trying to explain, I believe, to the American people how serious this problem is.

Mr. ROYCE. I want to encourage you to continue to do what you are doing on that front. If I might recommend opening every speech with trying to get people's attention, both in Congress and around the country, about this problem and what it will mean for future generations.

I also have a fiscal policy question for you, and it is on an issue on which I find myself in agreement with our current Treasury Secretary. We must do more to discourage these inversion transactions, and that is the use of mergers and a change of the P.O. box to avoid paying higher taxes here in the United States.

And in 1997 in your confirmation hearing, you said that the tax structure impacts decisions about work and investment. Other things being equal, lower taxes are better than higher taxes.

I am wondering, on the corporate tax part of this, if you have looked at this issue of inversion or if you have been involved in any conversations about the impact of our current tax system and relatively high marginal corporate tax rates, on job loss? And is this something you have discussed with Secretary Lew?

And on comprehensive tax reform, including a reduction of U.S. corporate tax rates, that is one possible solution to this problem. I wish we had—as you say, I wish we had more than a letter from the Treasury Secretary calling for—the words here that he used were, “a new sense of economic patriotism.”

We are going to need more than that new sense of economic patriotism. We need real leadership. And we need leadership out of the White House and we need leadership all around to pass a comprehensive tax reform.

Only President Reagan made it possible in 1986, in my view, and he did that in engagement with Tip O'Neill, right? And only an engaged President will make it possible today.

But could you speak to this inversion issue on what we might be able to do?

Mrs. YELLEN. I am sorry to say this is an issue that, while I am aware of it, I am not an expert on it. And it is a complex set of issues, and I think it is entirely appropriate for the Congress and the Administration to frame policy to deal with it.

But I don't think it is appropriate for me to give specific advice about how—

Mr. ROYCE. I understand that. But we are going to continue to lose ground in terms of economic productivity that you have spoken to in the country. If companies continue to change their domicile, we are going to lose receipts, we are going to lose jobs.

All of that is going to compound that problem that we spoke to earlier, which is now the long-term debt equals 100 percent of the overall economy 25 years from now under current trajectory. So if we want to change the trajectory, we have to do something, in my view, about this problem as well.

Mrs. YELLEN. I think it is entirely appropriate to try to frame appropriate policies to deal with this issue.

Mr. ROYCE. Thank you, Chair Yellen.

And thank you, Mr. Chairman.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair wishes to announce that we have three Members left in the queue. It is the Chair's intention to clear these three Members and excuse our witness, so if there are Members monitoring the hearing in their offices wanting to hasten over here to ask questions, do not bother.

The Chair now recognizes the gentleman from North Carolina, Mr. Pittenger, for 5 minutes.

Mr. PITTENGER. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for being with us again today.

Mrs. YELLEN. Thank you.

Mr. PITTENGER. Chair Yellen, Alice Rivlin, who was President Clinton's appointee to be Vice Chair of the Fed, endorsed the cost-benefit analysis requirement of the FRAT Act. Do you agree with her?

Mrs. YELLEN. I'm sorry, what did she endorse?

Mr. PITTENGER. She endorsed the cost-benefit analysis of the FRAT Act, the bill that we have been discussing today with Mr. Huizenga. Do you agree with her?

Mrs. YELLEN. I believe the Federal Reserve does do cost-benefit analysis where it is appropriate. When we—

Mr. PITTENGER. Do you believe it is appropriate in this case?

Mrs. YELLEN. I don't endorse the version of what is required in the FRAT Act. But I think we do appropriate and detailed and careful analysis of alternative ways to implement a regulation that implements a law that is passed by Congress. Rules—

Mr. PITTENGER. I appreciate what you are saying, Chair Yellen, but—so the bottom line is that you would not agree with Ms. Rivlin on this?

Mrs. YELLEN. I didn't have a chance to review her remarks, but I wouldn't endorse what is in the FRAT Act.

Mr. PITTENGER. Chair Yellen, we saw a recent report from the CBO that Obamacare is estimated to cost 2.5 million jobs over the next decade. Has the Fed done any estimates of how many jobs the implementation of Dodd-Frank is expected to cost the economy? Or is the Fed even interested in that?

Mrs. YELLEN. In evaluating a number of different regulations, we have attempted to do cost-benefit analysis. The overall conclusion we came to, for example, when we looked at our capital rules, was

that the reduced probability of a financial crisis, which takes an enormous toll on jobs—and we have just lived through that so we can see how large that can be—that the reduction in the odds we would live through a period like this again resulted in benefits that exceeded the cost of implementing higher capital standards.

Mr. PITTENGER. We sure are seeing it in North Carolina. In my district alone, the building permits aren't even up to 50 percent of what they were in 2008. That is a lot of lost jobs.

The same is true with community banks, the consolidations. There has been a lot of impact. And I would think that a measurable effect of Dodd-Frank would certainly be warranted.

Chair Yellen, with the lackluster growth we have had, though, there have been some bright spots. One in particular is in the energy sector. The Dakotas, Texas, Oklahoma, and other energy-producing States have presented—have had great job growth, particularly as it relates to the energy revolution that has come from the fracturing and other production of fossil fuels.

Chair Yellen, what effect would opening up other resources, the OCS, expanded drilling areas on land, ANWR, across the United States, have on the GDP, and what type of impact would that have on job growth?

Mrs. YELLEN. I would agree that we have seen a remarkable growth in the energy industry and a transformation of energy, our dependence on the rest of the world for energy.

We don't do calculations in the Federal Reserve of the type that you have asked about, what impact it would have on GDP—

Mr. PITTENGER. But it is common sense. You would agree that if we opened it up to the OCS and the other lands and ANWR that it could make an even greater, measurable difference?

Mrs. YELLEN. As you know, there are complicated policy issues and a number of different factors that come into play. And I think that is not in the domain of the Federal Reserve to opine on what is the right public policy in this area.

Mr. PITTENGER. Given the right political atmosphere, it would create jobs.

Chair Yellen, the Federal Reserve is now in the business of regulating insurance companies and currently supervises two insurance companies which have been designated as SIFIs, AIG and Prudential, and nearly a dozen insurance companies that have owned depository institutions, the likes of Nationwide Insurance, State Farm, and TIAA-CREF, to name a few.

Chair Yellen, other than one appointee who is now on that Board, a recently hired senior adviser with extensive background in insurance, how many full-time employees has the Fed hired with insurance expertise in the last year? And did the hires possess a particular insurance expertise?

Mrs. YELLEN. I can't give you a number, but I can tell you that we have worked hard both at the Board and in the Reserve Banks to increase our expertise. We are working closely with the Federal Insurance Office, with State regulators, and are trying to tailor supervision—

Mr. PITTENGER. Thank you. We are out of time. It does make sense, though, doesn't it?

Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Pennsylvania, Mr. Rothfus.

Mr. ROTHFUS. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for being with us today.

I would like to talk a little bit about the Federal Reserve Accountability and Transparency Act, which has been the topic of some discussion today. And what I am hearing from across the aisle with our colleagues, I have heard talk of a straitjacket. And then I think I heard you testifying about a “rigid rule” that you described in the proposed legislation.

Is it your testimony that this bill requires the Fed to follow a rigid rule for monetary policy?

Mrs. YELLEN. It requires us, as I understand it, to specify a rule, and when we don’t follow it, to explain exactly what the logic is or how we have changed the rule, and then calls for very rapid GAO involvement in overseeing the conduct of monetary policy if for any reason we were to deviate from the rule and—

Mr. ROTHFUS. I look at the Act and I see two rules described: a directive policy rule; and a reference policy rule. Now, the reference policy rule does set forth parameters for calculating a Fed funds rate. But there is no requirement in this Act that would require the FOMC to follow the reference policy rule, correct?

Mrs. YELLEN. That is what I see in the legislation, but—

Mr. ROTHFUS. So then we have a directive policy rule that simply requires the Fed to identify an interest rate. That is what the Fed is already doing when it announces a policy. It identifies an interest rate—and an explanation of what the FOMC doing.

If we were to boil down the directive policy rule, that is essentially saying it is—we are going to say there is going to be an interest rate and an explanation of what the Fed—FOMC is doing. Is that right?

Mrs. YELLEN. I think we regard it as incumbent upon ourselves to explain why we have adopted the policy we have, and—

Mr. ROTHFUS. And so that is what—basically that is what we are talking about here—

Mrs. YELLEN. Well, no—

Mr. ROTHFUS. —and the added requirement that you would explain or educate the Members of Congress and the American people on why you would deviate from a standard that was in place, similar to what was happening during the great moderation.

Mrs. YELLEN. It requires the specification of a mathematical rule and models and forecasts, which goes much, much, much further in straitjacketing how we would set monetary policy than setting an interest rate and providing Congress and the public with a explanation of the rationale for our policy decision, and then would bring to bear on Federal Reserve decision-making very quickly, in real time, oversight from the GAO and from Congress, and I believe fully bring into the process of Federal Reserve decision-making essentially short-term political influences.

I don’t believe it is—

Mr. ROTHFUS. I would like to talk a little bit about the independence of the Fed—again, another focus of our hearing today. Does

this apply to the Fed's regulatory responsibilities as well as its monetary policy?

Mrs. YELLEN. It is an exception that Congress made for monetary policy.

Mr. ROTHFUS. Okay. When we talk about writing a cost-benefit analysis requirement into law to ensure that the benefits of the Fed's regulations are greater than their costs, the same requirement that currently applies to the SEC and CFTC, we hear that judicial review under such a statute would compromise the Fed's independence.

Does the Fed's independence require that the Fed be exempt from review of its rules by the courts?

Mrs. YELLEN. The term, to me, "Fed independence," applies to monetary policy. I feel the cost-benefit analysis that we do is adequate, but that is a separate matter.

Mr. ROTHFUS. Okay. I want to follow up on Congressman Pittenger's line of questioning about the designation of insurance companies as SIFIs.

Other than hiring Thomas Sullivan as a senior adviser, what steps have you taken to ensure that the Federal Reserve has the requisite expertise to regulate insurance companies?

Mrs. YELLEN. We have hired individuals with that expertise, especially when we have taken on the oversight and supervision of savings and loan holding companies, some of which have heavy insurance involvement, including the ones that the Congressman mentioned. We have really greatly built our expertise and understanding of the insurance industry and its unique characteristics.

We have explicitly, when we came out with our 165 rules, refrained from putting in effect capital rules that would apply to heavily insurance-based companies in order to make sure that we thoroughly understand their unique characteristics.

Mr. ROTHFUS. I thank the chairman.

Chairman HENSARLING. The time of the gentleman has expired.

Last but not least, another gentleman from Pennsylvania, Mr. Fitzpatrick?

Mr. FITZPATRICK. Thank you, Chairman Hensarling.

I also want to thank Chair Yellen for the investment of time you have made here. I think you have been very generous with your time, which I know we all appreciate.

The number one issue in my district back in Bucks County, Pennsylvania, is jobs and the economy. And there has been much said about what appears to be a government rate of improving unemployment rate and what that says about our economy. And you have talked about that both in your policy report and your written statement here today.

In your oral statement, Chair Yellen, you said the unemployment rate has fallen nearly 1.5 percentage points over the past year. It stood at 6.1 percent in June, which is down 4 points—

Chairman HENSARLING. The gentleman will suspend. The clerk is having a little trouble hearing the gentleman. If you could speak a little closer to the microphone?

Mr. FITZPATRICK. Much has been said about the unemployment rate falling 4 points from the height. My concern is that these gov-

ernment numbers don't seem to distinguish between full-time employment and part-time employment—

Chairman HENSARLING. I'm sorry. If the gentleman would suspend one more time. For whatever reason, the clerk still can't hear the gentleman. Would you mind using the microphone adjacent to you and let's see if that corrects the problem?

Mr. FITZPATRICK. Is that better?

Chairman HENSARLING. Perhaps the microphone for Mr. Westmoreland might work?

I apologize. Let's try this.

Mr. FITZPATRICK. Okay.

Chair Yellen, in March you gave a speech about what the Fed is going to tackle the unemployment rate, and you made this observation—this is a quote: “The existence of such a large pool of partly unemployed workers is a sign that labor conditions are worse than indicated by the unemployment rate.” That was the National Interagency Community Reinvestment Conference in Chicago. That was back in March.

Do you believe that the unemployment rate, as currently reported by the Bureau of Labor Statistics, is an accurate snapshot of the labor market?

Mrs. YELLEN. It is one particular measure but it is obviously not complete. The Bureau of Labor Statistics reports on the number of individuals who are part-time employed and involuntarily so would like more work, and that figure has been running about 5 percent of the labor force, which is an unusually high level.

The Labor Department computes some broader statistics pertaining to unemployment. One of them is called U-6, and it is the standard civilian unemployment rate with those involuntary part-time employees added in, and also those who were discouraged or marginally attached to the labor force, and that is a number that is much higher. It is running around 12 percent; it has come down significantly, along with the narrower measure of unemployment. But clearly what is called the U-3, or the 6.1 percent unemployment rate, is not a complete measure of what is happening in the labor market.

That is why we have said, the Federal Reserve, the FOMC has said, we are looking at a broad measure of indicators, including many indicators of the labor market, to assess where it stands.

Mr. FITZPATRICK. Because many here on the legislative side look at the unemployment rate, I guess it is the U-3, which is 6.1 percent, and looking at that to drive policy decisions on spending, on programs, and the like.

So which do you think is the better reflection of the true employment picture of our Nation? Because my constituents are not buying the 6.1 percent. It doesn't feel right. They know it is not right. It is not an accurate reflection of what is really going on in the economy in real towns across America.

Mrs. YELLEN. That is why I believe you have to look at many measures of the labor market, and there obviously is more distress than is captured in that 6.1 percent number, and the 12 percent, for example, or roughly the U-6 measure is capturing a broader range of distress.

But there are many metrics. We can't judge something as complicated as the labor market by one number—

Mr. FITZPATRICK. Is there anything in particular that the Bureau of Labor Statistics can do to create a more accurate picture of the economy?

Mrs. YELLEN. I think we shouldn't try to look for one single number to assess what is a complicated phenomenon. If I had to choose one and only one number to look at, I would choose the 6.1 percent U-3 number. But I don't think that is adequate and I think we should want a broad range of measurements of different aspects of the labor market and to keep them all in mind.

Mr. FITZPATRICK. I remain concerned by these monthly reports that say the unemployment rate is coming down not counting individuals who are—distinguishing between those who work part-time and those who work full-time, not counting individuals who are not actively engaged in a search, who have given up on the search. People are desperately looking for work. They are not reflected in the numbers of the government that is supposed to care about that.

Mrs. YELLEN. I agree, and I mentioned my own concern with some who are simply measured as out of the labor force who might rejoin and want work if it were available.

Mr. FITZPATRICK. Madam Chair, thanks for your service. I appreciate it.

Mrs. YELLEN. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. I would like to thank Chair Yellen for her testimony today.

The Chair notes that some Members may have additional questions for this witness, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to this witness and to place her responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

This hearing stands adjourned.

[Whereupon, at 1:03 p.m., the hearing was adjourned.]

A P P E N D I X

July 16, 2014

For release on delivery
10:00 a.m. EDT
July 16, 2014

Statement by
Janet L. Yellen
Chair
Board of Governors of the Federal Reserve System
before the
Committee on Financial Services
U.S. House of Representatives
July 16, 2014

Chairman Hensarling, Ranking Member Waters, and members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report* to the Congress. In my remarks today, I will discuss the current economic situation and outlook before turning to monetary policy. I will conclude with a few words about financial stability.

Current Economic Situation and Outlook

The economy is continuing to make progress toward the Federal Reserve's objectives of maximum employment and price stability.

In the labor market, gains in total nonfarm payroll employment averaged about 230,000 per month over the first half of this year, a somewhat stronger pace than in 2013 and enough to bring the total increase in jobs during the economic recovery thus far to more than 9 million. The unemployment rate has fallen nearly 1-1/2 percentage points over the past year and stood at 6.1 percent in June, down about 4 percentage points from its peak. Broader measures of labor utilization have also registered notable improvements over the past year.

Real gross domestic product (GDP) is estimated to have declined sharply in the first quarter. The decline appears to have resulted mostly from transitory factors, and a number of recent indicators of production and spending suggest that growth rebounded in the second quarter, but this bears close watching. The housing sector, however, has shown little recent progress. While this sector has recovered notably from its earlier trough, housing activity leveled off in the wake of last year's increase in mortgage rates, and readings this year have, overall, continued to be disappointing.

Although the economy continues to improve, the recovery is not yet complete. Even with the recent declines, the unemployment rate remains above Federal Open Market Committee (FOMC) participants' estimates of its longer-run normal level. Labor force participation appears weaker than one would expect based on the aging of the population and the level of

unemployment. These and other indications that significant slack remains in labor markets are corroborated by the continued slow pace of growth in most measures of hourly compensation.

Inflation has moved up in recent months but remains below the FOMC's 2 percent objective for inflation over the longer run. The personal consumption expenditures (PCE) price index increased 1.8 percent over the 12 months through May. Pressures on food and energy prices account for some of the increase in PCE price inflation. Core inflation, which excludes food and energy prices, rose 1.5 percent. Most Committee participants project that both total and core inflation will be between 1-1/2 and 1-3/4 percent for this year as a whole.

Although the decline in GDP in the first quarter led to some downgrading of our growth projections for this year, I and other FOMC participants continue to anticipate that economic activity will expand at a moderate pace over the next several years, supported by accommodative monetary policy, a waning drag from fiscal policy, the lagged effects of higher home prices and equity values, and strengthening foreign growth. The Committee sees the projected pace of economic growth as sufficient to support ongoing improvement in the labor market with further job gains, and the unemployment rate is anticipated to continue to decline toward its longer-run sustainable level. Consistent with the anticipated further recovery in the labor market, and given that longer-term inflation expectations appear to be well anchored, we expect inflation to move back toward our 2 percent objective over coming years.

As always, considerable uncertainty surrounds our projections for economic growth, unemployment, and inflation. FOMC participants currently judge these risks to be nearly balanced but to warrant monitoring in the months ahead.

Monetary Policy

I will now turn to monetary policy. The FOMC is committed to policies that promote maximum employment and price stability, consistent with our dual mandate from the Congress.

Given the economic situation that I just described, we judge that a high degree of monetary policy accommodation remains appropriate. Consistent with that assessment, we have maintained the target range for the federal funds rate at 0 to 1/4 percent and have continued to rely on large-scale asset purchases and forward guidance about the future path of the federal funds rate to provide the appropriate level of support for the economy.

In light of the cumulative progress toward maximum employment that has occurred since the inception of the Federal Reserve's asset purchase program in September 2012 and the FOMC's assessment that labor market conditions would continue to improve, the Committee has made measured reductions in the monthly pace of our asset purchases at each of our regular meetings this year. If incoming data continue to support our expectation of ongoing improvement in labor market conditions and inflation moving back toward 2 percent, the Committee likely will make further measured reductions in the pace of asset purchases at upcoming meetings, with purchases concluding after the October meeting. Even after the Committee ends these purchases, the Federal Reserve's sizable holdings of longer-term securities will help maintain accommodative financial conditions, thus supporting further progress in returning employment and inflation to mandate-consistent levels.

The Committee is also fostering accommodative financial conditions through forward guidance that provides greater clarity about our policy outlook and expectations for the future path of the federal funds rate. Since March, our postmeeting statements have included a description of the framework that is guiding our monetary policy decisions. Specifically, our decisions are and will be based on an assessment of the progress--both realized and expected--toward our objectives of maximum employment and 2 percent inflation. Our evaluation will not hinge on one or two factors, but rather will take into account a wide range of information,

including measures of labor market conditions, indicators of inflation and long-term inflation expectations, and readings on financial developments.

Based on its assessment of these factors, in June the Committee reiterated its expectation that the current target range for the federal funds rate likely will be appropriate for a considerable period after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal and provided that inflation expectations remain well anchored. In addition, we currently anticipate that even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the federal funds rate below levels that the Committee views as normal in the longer run.

Of course, the outlook for the economy and financial markets is never certain, and now is no exception. Therefore, the Committee's decisions about the path of the federal funds rate remain dependent on our assessment of incoming information and the implications for the economic outlook. If the labor market continues to improve more quickly than anticipated by the Committee, resulting in faster convergence toward our dual objectives, then increases in the federal funds rate target likely would occur sooner and be more rapid than currently envisioned. Conversely, if economic performance is disappointing, then the future path of interest rates likely would be more accommodative than currently anticipated.

The Committee remains confident that it has the tools it needs to raise short-term interest rates when the time is right and to achieve the desired level of short-term interest rates thereafter, even with the Federal Reserve's elevated balance sheet. At our meetings this spring, we have been constructively working through the many issues associated with the eventual normalization of the stance and conduct of monetary policy. These ongoing discussions are a matter of prudent planning and do not imply any imminent change in the stance of monetary policy. The

Committee will continue its discussions in upcoming meetings, and we expect to provide additional information later this year.

Financial Stability

The Committee recognizes that low interest rates may provide incentives for some investors to “reach for yield,” and those actions could increase vulnerabilities in the financial system to adverse events. While prices of real estate, equities, and corporate bonds have risen appreciably and valuation metrics have increased, they remain generally in line with historical norms. In some sectors, such as lower-rated corporate debt, valuations appear stretched and issuance has been brisk. Accordingly, we are closely monitoring developments in the leveraged loan market and are working to enhance the effectiveness of our supervisory guidance. More broadly, the financial sector has continued to become more resilient, as banks have continued to boost their capital and liquidity positions, and growth in wholesale short-term funding in financial markets has been modest.

Summary

In sum, since the February *Monetary Policy Report*, further important progress has been made in restoring the economy to health and in strengthening the financial system. Yet too many Americans remain unemployed, inflation remains below our longer-run objective, and not all of the necessary financial reform initiatives have been completed. The Federal Reserve remains committed to employing all of its resources and tools to achieve its macroeconomic objectives and to foster a stronger and more resilient financial system.

Thank you. I would be pleased to take your questions.

Congress of the United States
Washington, DC 20515

June 18, 2014

The Honorable Barack Obama
President of the United States
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear President Obama:

As you consider nominees for the current vacancies on the Board of Governors of the Federal Reserve System, we strongly urge you to nominate an individual with community banking or supervisory experience. We believe it's in the Federal Reserve's best interest to have a representative who understands the unique needs and perspectives of community banks when key economic and regulatory decisions are debated.

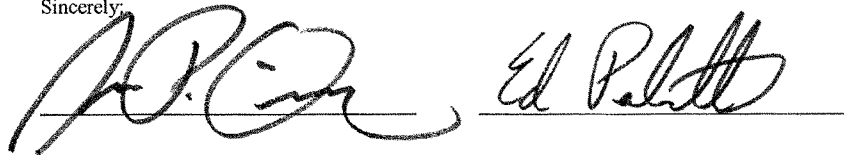
As the backbone of our economy, community banks are a critical source of capital and credit for millions of individuals and small businesses. According to the Federal Deposit Insurance Corp (FDIC), community banks provide nearly 60% of all small business loans, creating jobs and opportunities for millions of families nationwide. And the role of community banks is even more critical in rural America. In fact, the FDIC also noted that one in five U.S. counties has no other physical banking presence other than their local community bank.

Furthermore, community banks face a unique set of challenges, and despite their importance to our economy, regulatory and compliance costs take their toll. As a result, consolidation of community banks continues to increase and Americans will be left with less banking choices and access to credit.

We believe these factors underscore the need for a strong, continued voice for community banks. Many have already noted the contributions previous Board Governors with community banking experience have made such as former community banker, Elizabeth A. Duke.

For these reasons, we strongly urge you to nominate an individual with community bank experience to fill the upcoming vacancies on the Board of Governors of the Federal Reserve.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed Palitt", is written over a horizontal line. The signature is stylized and cursive.

Ron Kind	Jim Amherst
Stuckensch	Robert E. Jatto
K. Mark Coff	Robert B. Adelman
Sam Farn	Gregory W. Mahr
Tom Mann	Marcy Kipton
Joyce Bestday	Tom Cotton
Ann Wayne	Denny Heck
Jim Myerson	J. J. E.
Karly Hattgen	Paul King
Vic M. K.	Bob Sims
Scott D. Hinton	Lynette Bern
	Marsha Blankenship

Scott Garrett

John Barrett

Walter B. Jones

Symon Whitaker

William R. Jones

Tom R. Jones

Walter R. Jones

John R. Jones

Ann M. Jones

Michael H. Jones

Mike Jones

Jim Matheson

Patrick J. Matheson

Peter Welch

Fred D. Jones

David Lamborn

Barry Jones

Mike Jones

Bill Jones

Tim Huelbeck

Keith J. Rothfus

Paul A. Jones

Bill Huizenga

Tim Shiffri

Michael E. Czuano

Adam Norder

Tony Cirdend

Patrick Murphy

Carol Shea-Power

Hept Lee Fird

Kem Acan

Ben Binn

Rubin Hengara

David Schmitt

Bill Foster

John C. Carney

Randy Nigh

Andy Brown

Reid J. Ribble

Mike Kelly

Joan Vargas

Jaime Herrera-Bentler

Lynor Jenkins

Jayong

Ewen Laane

Michael B. Jensen

<u>Daniel T. Kieran</u>	<u>D. O. Am</u>
<u>[Signature]</u>	<u>Ann Scott</u>
<u>Robert Rittinger</u>	<u>Michael Bachman</u>
<u>Louise M. Slaughter</u>	<u>Lee Terry</u>
<u>Betty McCormick</u>	<u>Peter F. Brown TX-17</u>
<u>Roger Williams</u>	<u>[Signature]</u>

Member First Name	Member Last Name
Sean	Duffy
Ed	Perlmutter
Robert	Aderholt
Michele	Bachmann
Andy	Barr
John	Barrow
Joyce	Beatty
Ami	Bera
Herrera	Beutler
Marsha	Blackburn
Mike	Capuano
Tony	Cardenas
John	Carney
Mike	Conaway
Tom	Cotton
Kevin	Cramer
John	Delaney
Suzan	DelBene
Mario	Diaz-Balart
Jeff	Duncan
Sam	Farr
Stephen	Fincher
Bill	Flores
Bill	Foster
Scott	Garrett
Bob	Gibbs
Louie	Gohmert
Paul	Gosar
Tim	Griffin
Michael	Grimm
Denny	Heck
Ruben	Hinojosa
Tim	Huelskamp
Bill	Huizenga
Randy	Hultgren
Robert	Hurt
Lynn	Jenkins
Walter	Jones
Marcy	Kaptur
Mike	Kelly
Dan	Kildee
Ron	Kind
Peter	King
Doug	Lamborn

Member First Name	Member Last Name
James	Lankford
Bob	Latta
Frank	Lucas
Ben Ray	Lujan
Tom	Marino
Jim	Matheson
Vance	McAlister
Betty	McCollum
Jim	McGovern
Patrick	McHenry
Ann	McLane Kuster
Gregory	Meeks
Gwen	Moore
Mick	Mulvaney
Patrick	Murphy
Randy	Neugebauer
Alan	Nunnelee
Steve	Pearce
Tom	Petri
Robert	Pittenger
Mike	Pompeo
Bill	Posey
Tom	Reed
Reid	Ribble
Dennis	Ross
Keith	Rothfus
David	Scott
F. James	Sensenbrenner
Carol	Shea-Porter
Louise	Slaughter
Steve	Stivers
Lee	Terry
Scott	Tipton
Michael	Turner
Juan	Vargas
Ann	Wagner
Maxine	Waters
Peter	Welch
Lynn	Westmoreland
Robert	Williams
Steve	Womack
Todd	Young



Americans for Financial Reform
 1629 K St NW, 10th Floor, Washington, DC, 20006
 202.466.1885

July 10, 2014

Dear Representative,

On behalf of Americans for Financial Reform (AFR), we are writing to express our opposition to “The Federal Reserve Accountability and Transparency Act”.¹ Among other responsibilities, the Federal Reserve is the single most significant regulator of U.S. financial institutions, including the large Wall Street banks that played a central role in the 2008 financial crisis. This legislation would dramatically reduce the ability of the Federal Reserve to effectively regulate these institutions. Section 4 of the legislation would require the agency to give detailed advance information to major financial institutions concerning the methods that will be used for ‘stress testing’ their safety and soundness. Section 7 of the legislation would impose dozens of complex and potentially contradictory cost-benefit requirements that must be satisfied prior to any Federal Reserve rulemaking. Any one of these cost-benefit requirements could be used as the basis for a lawsuit by Wall Street interests seeking to avoid regulatory oversight. These provisions are completely at odds with the ability of the Federal Reserve to perform its regulatory functions.

AFR has consistently supported reform of the Federal Reserve. This includes support for legislation on Federal Reserve transparency advanced by former Representative Ron Paul and Senator Sanders, and support for legislation on ending conflicts of interest in Federal Reserve governance advanced by Representative De Fazio and Senator Sanders.² Most recently, we have strongly opposed the lack of appropriate accountability and limitations in the Federal Reserve’s proposed emergency lending powers, echoing criticisms that have also been made by Chairman Hensarling of the Financial Services Committee.³ However, the major impact of this legislation would not be to reform the Federal Reserve, but to empower our largest banks to block Federal Reserve regulatory oversight of Wall Street. Below, we detail specific issues with the bill.

Section 4 – Requirements For Stress Tests

Section 165 of the Dodd-Frank Act requires the Federal Reserve, as the consolidated supervisor of the major bank holding companies that dominate Wall Street, to subject these financial institutions to annual supervisory ‘stress tests’. These tests are intended to serve as an objective

¹ Americans for Financial Reform is a coalition of more than 200 national, state and local groups who have come together to reform the financial industry. Members of our coalition include consumer, civil rights, investor, retiree, community, labor, faith based and business groups.

² See e.g. Americans for Financial Reform, “AFR Supports Federal Reserve Transparency Amendment”, May 4, 2010; Americans for Financial Reform, “AFR Letter To Senator Sanders Re Federal Reserve Independence Act”, June 1, 2012.

³ Americans for Financial Reform, “Comment Letter Re Extensions of Credit By Federal Reserve Banks; Docket No. R-1476 RIN 7100-AE08”, March 10, 2014. See also U.S. House of Representatives, Committee on Financial Services, “Comment on Extensions of Credit By Federal Reserve Banks”, January 13, 2014.

and independent check on the financial soundness of the financial institution and the private resources it has available to absorb potential future losses due to its loans and other investments. The stress testing requirement is designed to protect taxpayers and avoid a situation like the one experienced in 2007 and 2008, where despite clear signs of financial stress the major banks distributed some \$80 billion in dividends to shareholders. Later in 2008, taxpayers had to make up this lost capital through capital injections under the TARP program.⁴

Stress tests have become crucial to the emerging post-crisis system of financial supervision. Federal Reserve Governor Tarullo recently called them a ‘cornerstone’ of the regulatory response to the financial crisis.⁵ Yet the changes made in Section 4 of this bill would greatly weaken the ability of the Federal Reserve to perform effective supervisory stress testing. The legislation would require public notice and comment rulemaking in advance of any stress test that detailed the exact models, methodologies, and assumptions to be used in the stress test. Just as one would not require schools to provide tests to their students in advance, it is inappropriate to require the Federal Reserve to provide the details of what is intended to be an independent supervisory assessment to regulated entities in advance.

Such advance notice would allow banks to tailor their exposures to the specific methods to be used by the Federal Reserve to measure their risk. The ability to ‘game the system’ in this manner would reduce the efficacy of stress tests as an objective and external check on bank risks. It would also encourage an unhealthy private sector focus on making decisions that produced benefits under the Federal Reserve’s stress testing models, rather than pursuing independent judgments of risk and benefit. In addition, this change would allow banks to bring lawsuits under the Administrative Procedures Act to block stress test procedures they feel would reveal shortcomings in their risk management.

AFR is critical of some aspects of Federal Reserve stress testing policies, particularly in cases where a reliance on stress testing seems to be a substitute for more fundamental structural reform. More information concerning the stress testing process, possibly including some modeling assumptions, could be useful for the public to better understand the strengths and weaknesses of stress tests as a supervisory method. But the Federal Reserve does already provide significant transparency into the stress test process, both in its post-test announcements of results and through events such as the annual Stress Test Modeling Symposiums sponsored by the Boston Federal Reserve. Furthermore, it is crucial that any additional transparency be created in a manner that does not reduce the value and efficacy of stress tests as an independent supervisory check on bank risks. The changes in this bill certainly do not meet this requirement.

Section 7 – Requirements for Cost Benefit Analysis

Section 7 of the legislation imposes some two dozen new requirements for cost-benefit analysis prior to any Federal Reserve rulemaking, or interpretation of an existing rule or law. Indeed, since the section also requires the agency to assess the costs and benefits of all the potentially

⁴ Rosengren, Eric, “Dividend Policy And Capital Retention: A Systemic ‘First Response’”, Speech delivered at Rethinking Central Banking Conference, Washington, DC, October 10, 2010.

⁵ Tarullo, Daniel, “Stress Testing After Five Years”, Speech delivered at the Third Annual Stress Test Modeling Symposium, Boston, Massachusetts, June 25, 2014.

numerous alternatives to the regulation actually proposed, the additional analyses required by this legislation could easily be far greater. Not only are these new requirements numerous and complex, they are also potentially contradictory. For example, the section requires that any new regulation impose “the least burden...on market participants” and also that it “maximize net benefits”. Yet the regulatory approach that maximizes net benefits for society may not be the approach that minimizes costs for market participants.

Because these new requirements are placed in statute, any Wall Street interest seeking to block a Federal Reserve rule could sue in court by contesting the Federal Reserve’s findings on any of these numerous cost-benefit requirements. (This is a crucial distinction between these statutory requirements and cost-benefit language in executive orders or recommendations). Due to the inherent uncertainty and difficulty in the quantitative measurement of the impact of financial regulations, including hypothetical alternatives to such regulations, it will always be possible for industry-funded researchers to contest them in some way. For example, an extensive industry-funded study of new global capital rules claimed that they would raise U.S. lending rates by over 4.6 percentage points – between eight and sixteen times higher than the estimates found by multiple independent studies.⁶ Even genuinely independent studies can show significant uncertainties in the future impacts of financial regulations.⁷

In this context, it is worth noting that the Federal Reserve employs more PhD economists than any other institution in the world, and already performs extensive economic analysis on the impact of its regulations. For example, the Federal Reserve played a central role in the analysis of the economic impact of new Basel Committee capital standards and global derivatives rules. As part of this analysis, at least four different major impact assessments were published, each of which drew on dozens of different academic and regulatory economic analyses.⁸ The effect of the cost-benefit provisions in this legislation would not be to improve economic analysis at the Federal Reserve. Instead, by enabling Wall Street lawsuits on any of numerous cost-benefit requirements, this legislation would take economic analysis out of the hands of the hundreds of

⁶ The industry-funded report is Institute for International Finance, “The Cumulative Impact on The Global Economy of Changes In The Financial Regulatory Framework”, Washington, DC, September 6, 2011. See Table I.1 for U.S. lending rate estimate. For an example of independent studies finding far lower impacts, see e.g. Santos, Andre Oliveira and Douglas Elliot, “Estimating the Costs of Financial Regulation”, International Monetary Fund, IMF Staff Discussion Note SDN 12/11, September 11, 2012. See Table 6 for cumulative U.S. lending rate estimate. This study also provides a literature review of other studies.

⁷ For example, international regulators consulted seven different academic models in estimating the benefits of raising bank capital standards. While on average these models showed strong benefits from increasing capital from current levels, the benefits varied from extremely high to in one case almost zero. See Annex II, Table A2.1, in Basel Committee on Banking Supervision, “An Assessment of the Long-Term Economic Impacts of Stronger Capital and Liquidity Requirements”, Bank of International Settlements, August, 2010.

⁸ Basel Committee on Banking Supervision, “An Assessment of the Long-Term Economic Impacts of Stronger Capital and Liquidity Requirements”, Bank of International Settlements, August, 2010; Macroeconomic Assessment Group, “Final Report: Assessing the Impact of the Transition to Stronger Capital and Liquidity Requirements”, Bank of International Settlements, December, 2010; Macroeconomic Assessment Group, “Assessment of the Macroeconomic Impact of Higher Loss Absorbency For Global Systemically Important Banks”, Bank of International Settlements, October 10, 2011; Macroeconomic Assessment Group on Derivatives, “Macroeconomic Impact Assessment of OTC Derivatives Regulatory Reforms”, Bank of International Settlements, August, 2013.

high-level economists employed by the agency and place it in the hands of judges and lawyers who may have no formal economics training at all.

Section 9 – International Negotiations

Section 9 of this bill requires an extensive schedule of public consultation and comment before and after any employee of the Federal Reserve Board, FDIC, or Treasury “enters into negotiations” with any foreign or multinational entity. The regulation of global financial markets involves extensive consultations with foreign regulators, including regulators of banks active in the U.S. markets, and interactions with foreign and multinational entities are routine for U.S. regulators. The vague definition of ‘enters into negotiations’ and the extensive consultation requirements in this section would place an impossible administrative burden on financial regulators, potentially requiring volumes of paperwork before any phone call with their international counterparts.

It is also ironic that this section does not improve or increase public transparency in an area where improved public transparency is desperately needed, namely international trade negotiations and the activities of the U.S. Trade Representative (USTR) regarding financial regulatory issues. The USTR conducts extensive secret multi-year negotiations that can have profound impacts on a range of financial regulatory issues, and provides very little transparency or access into the process. In contrast, financial regulators, including multinational consultative groups, provide significant detail on their regulatory recommendations and proposals to the public, and solicit public comment in advance of final recommendations.⁹

While AFR would favor improved transparency for international negotiations, such transparency must be compatible with the capacity of financial regulators to work with their international counterparts free of excessive bureaucratic burdens. And the first priority for such transparency should be trade negotiations, not financial regulatory issues where significant transparency is already available.

Other Provisions of the Bill

Other sections of this legislation include some provisions worthy of further exploration on their own. This includes various provisions in Section 8 that would permit Federal Reserve governors to hire their own staff and possibly certain ethics requirements, as well as provisions that increase the number of times the Federal Reserve chair testifies on monetary policy.

Section 2 of the legislation proposes an extensive set of new requirements around monetary policy. AFR has not taken positions in this area.

In sum, we urge you to reject “The Federal Reserve Accountability and Transparency Act”. Instead of genuinely improving accountability and transparency at the Federal Reserve, the effect

⁹ See for example the Financial Stability Board web site at www.financialstabilityboard.org which contains information on international processes and proposals, as well as the Bank of International Settlements at www.bis.org.

of this bill would be to empower Wall Street to prevent effective Federal Reserve oversight of the nation's largest banks.

Thank you for the opportunity to express our views on this legislation. Should you have additional questions on this issue, please contact Marcus Stanley, AFR's Policy Director, at marcus@ourfinancialsecurity.org or 202-466-3672.

Sincerely,
Americans for Financial Reform

Following are the partners of Americans for Financial Reform.

All the organizations support the overall principles of AFR and are working for an accountable, fair and secure financial system. Not all of these organizations work on all of the issues covered by the coalition or have signed on to every statement.

- AARP
- A New Way Forward
- AFL-CIO
- AFSCME
- Alliance For Justice
- American Income Life Insurance
- American Sustainable Business Council
- Americans for Democratic Action, Inc
- Americans United for Change
- Campaign for America's Future
- Campaign Money
- Center for Digital Democracy
- Center for Economic and Policy Research
- Center for Economic Progress
- Center for Media and Democracy
- Center for Responsible Lending
- Center for Justice and Democracy
- Center of Concern
- Center for Effective Government
- Change to Win
- Clean Yield Asset Management
- Coastal Enterprises Inc.
- Color of Change
- Common Cause
- Communications Workers of America
- Community Development Transportation Lending Services
- Consumer Action
- Consumer Association Council
- Consumers for Auto Safety and Reliability
- Consumer Federation of America
- Consumer Watchdog
- Consumers Union
- Corporation for Enterprise Development
- CREDO Mobile
- CTW Investment Group
- Demos
- Economic Policy Institute
- Essential Action
- Green America
- Greenlining Institute

- Good Business International
- HNMA Funding Company
- Home Actions
- Housing Counseling Services
- Home Defender's League
- Information Press
- Institute for Agriculture and Trade Policy
- Institute for Global Communications
- Institute for Policy Studies: Global Economy Project
- International Brotherhood of Teamsters
- Institute of Women's Policy Research
- Krull & Company
- Laborers' International Union of North America
- Lawyers' Committee for Civil Rights Under Law
- Main Street Alliance
- Move On
- NAACP
- NASCAT
- National Association of Consumer Advocates
- National Association of Neighborhoods
- National Community Reinvestment Coalition
- National Consumer Law Center (on behalf of its low-income clients)
- National Consumers League
- National Council of La Raza
- National Council of Women's Organizations
- National Fair Housing Alliance
- National Federation of Community Development Credit Unions
- National Housing Resource Center
- National Housing Trust
- National Housing Trust Community Development Fund
- National NeighborWorks Association
- National Nurses United
- National People's Action
- National Urban League
- Next Step
- OpenTheGovernment.org
- Opportunity Finance Network
- Partners for the Common Good
- PICO National Network
- Progress Now Action
- Progressive States Network
- Poverty and Race Research Action Council
- Public Citizen
- Sargent Shriver Center on Poverty Law
- SEIU
- State Voices
- Taxpayer's for Common Sense
- The Association for Housing and Neighborhood Development

- The Fuel Savers Club
- The Leadership Conference on Civil and Human Rights
- The Seminal
- TICAS
- U.S. Public Interest Research Group
- UNITE HERE
- United Food and Commercial Workers
- United States Student Association
- USAction
- Veris Wealth Partners
- Western States Center
- We the People Now
- Woodstock Institute
- World Privacy Forum
- UNET
- Union Plus
- Unitarian Universalist for a Just Economic Community

List of State and Local Partners

- Alaska PIRG
- Arizona PIRG
- Arizona Advocacy Network
- Arizonans For Responsible Lending
- Association for Neighborhood and Housing Development NY
- Audubon Partnership for Economic Development LDC, New York NY
- BAC Funding Consortium Inc., Miami FL
- Beech Capital Venture Corporation, Philadelphia PA
- California PIRG
- California Reinvestment Coalition
- Century Housing Corporation, Culver City CA
- CHANGER NY
- Chautauqua Home Rehabilitation and Improvement Corporation (NY)
- Chicago Community Loan Fund, Chicago IL
- Chicago Community Ventures, Chicago IL
- Chicago Consumer Coalition
- Citizen Potawatomi CDC, Shawnee OK
- Colorado PIRG
- Coalition on Homeless Housing in Ohio
- Community Capital Fund, Bridgeport CT
- Community Capital of Maryland, Baltimore MD
- Community Development Financial Institution of the Tohono O'odham Nation, Sells AZ
- Community Redevelopment Loan and Investment Fund, Atlanta GA
- Community Reinvestment Association of North Carolina
- Community Resource Group, Fayetteville A
- Connecticut PIRG
- Consumer Assistance Council
- Cooper Square Committee (NYC)

- Cooperative Fund of New England, Wilmington NC
- Corporacion de Desarrollo Economico de Ceiba, Ceiba PR
- Delta Foundation, Inc., Greenville MS
- Economic Opportunity Fund (EOF), Philadelphia PA
- Empire Justice Center NY
- Empowering and Strengthening Ohio's People (ESOP), Cleveland OH
- Enterprises, Inc., Berea KY
- Fair Housing Contact Service OH
- Federation of Appalachian Housing
- Fitness and Praise Youth Development, Inc., Baton Rouge LA
- Florida Consumer Action Network
- Florida PIRG
- Funding Partners for Housing Solutions, Ft. Collins CO
- Georgia PIRG
- Grow Iowa Foundation, Greenfield IA
- Homewise, Inc., Santa Fe NM
- Idaho Nevada CDFI, Pocatello ID
- Idaho Chapter, National Association of Social Workers
- Illinois PIRG
- Impact Capital, Seattle WA
- Indiana PIRG
- Iowa PIRG
- Iowa Citizens for Community Improvement
- JobStart Chautauqua, Inc., Mayville NY
- La Casa Federal Credit Union, Newark NJ
- Low Income Investment Fund, San Francisco CA
- Long Island Housing Services NY
- MaineStream Finance, Bangor ME
- Maryland PIRG
- Massachusetts Consumers' Coalition
- MASSPIRG
- Massachusetts Fair Housing Center
- Michigan PIRG
- Midland Community Development Corporation, Midland TX
- Midwest Minnesota Community Development Corporation, Detroit Lakes MN
- Mile High Community Loan Fund, Denver CO
- Missouri PIRG
- Mortgage Recovery Service Center of L.A.
- Montana Community Development Corporation, Missoula MT
- Montana PIRG
- New Economy Project
- New Hampshire PIRG
- New Jersey Community Capital, Trenton NJ
- New Jersey Citizen Action
- New Jersey PIRG
- New Mexico PIRG
- New York PIRG
- New York City Aids Housing Network

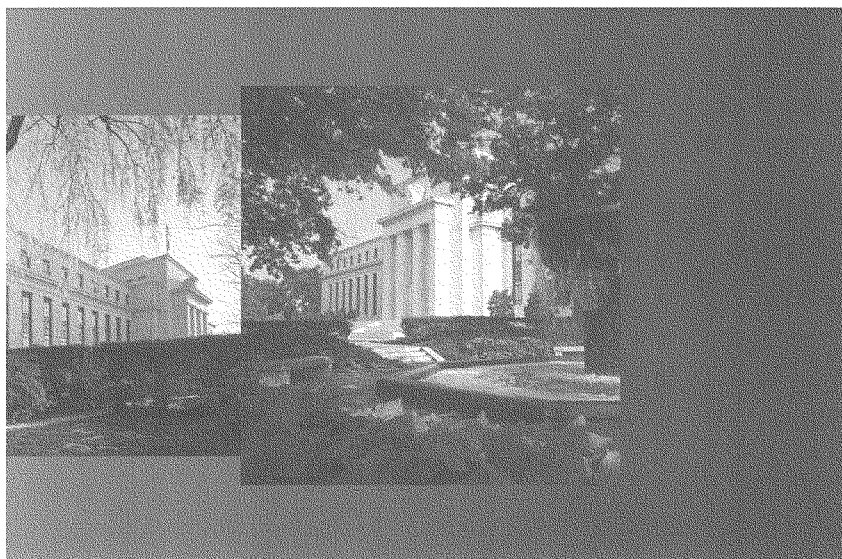
- New Yorkers for Responsible Lending
- NOAH Community Development Fund, Inc., Boston MA
- Nonprofit Finance Fund, New York NY
- Nonprofits Assistance Fund, Minneapolis M
- North Carolina PIRG
- Northside Community Development Fund, Pittsburgh PA
- Ohio Capital Corporation for Housing, Columbus OH
- Ohio PIRG
- OligarchyUSA
- Oregon State PIRG
- Our Oregon
- PennPIRG
- Piedmont Housing Alliance, Charlottesville VA
- Michigan PIRG
- Rocky Mountain Peace and Justice Center, CO
- Rhode Island PIRG
- Rural Community Assistance Corporation, West Sacramento CA
- Rural Organizing Project OR
- San Francisco Municipal Transportation Authority
- Seattle Economic Development Fund
- Community Capital Development
- TexPIRG
- The Fair Housing Council of Central New York
- The Loan Fund, Albuquerque NM
- Third Reconstruction Institute NC
- Vermont PIRG
- Village Capital Corporation, Cleveland OH
- Virginia Citizens Consumer Council
- Virginia Poverty Law Center
- War on Poverty - Florida
- WashPIRG
- Westchester Residential Opportunities Inc.
- Wigamig Owners Loan Fund, Inc., Lac du Flambeau WI
- WISPIRG

Small Businesses

- Blu
- Bowden-Gill Environmental
- Community MedPAC
- Diversified Environmental Planning
- Hayden & Craig, PLLC
- Mid City Animal Hospital, Pheonix AZ
- UNET

MONETARY POLICY REPORT

July 15, 2014



Board of Governors of the Federal Reserve System

LETTER OF TRANSMITTAL



BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., July 15, 2014

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

The Board of Governors is pleased to submit its *Monetary Policy Report* pursuant to section 2B of the Federal Reserve Act.

Sincerely,

A handwritten signature in cursive script, reading "Janet L. Yellen", is positioned below the word "Sincerely,".

Janet L. Yellen, Chair

STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

As amended effective January 28, 2014

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 5.8 percent.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

CONTENTS

Summary	1
Part 1: Recent Economic and Financial Developments	3
Domestic Developments	3
Financial Developments	15
International Developments	26
Part 2: Monetary Policy	33
Part 3: Summary of Economic Projections	41
The Outlook for Economic Activity	44
The Outlook for Inflation	47
Appropriate Monetary Policy	47
Uncertainty and Risks	51
Abbreviations	55
List of Boxes	
The Slow Recovery of Housing Activity	16
Developments Related to Financial Stability	22
Prospects for Monetary Policy Normalization in the Advanced Economies	30
Planning for Monetary Policy Implementation during Normalization	38
Forecast Uncertainty	54

NOTE: Unless otherwise noted, the time series in the figures extend through, for daily data, July 10, 2014; for monthly data, June 2014; and, for quarterly data, 2014:Q1. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

SUMMARY

The overall condition of the labor market continued to improve during the first half of 2014. Gains in payroll employment picked up to an average monthly pace of about 230,000, and the unemployment rate fell to 6.1 percent in June, nearly 4 percentage points below its peak in 2009. Notwithstanding those improvements, a broad array of labor market indicators—such as labor force participation, hiring and quit rates, and the number of people working part time for economic reasons—generally suggests that significant slack remains in the labor market. Continued slow increases in most measures of labor compensation also corroborate the view that labor resources are not being fully utilized.

Inflation has moved up this year following unusually low readings in 2013, but it has remained somewhat below the Federal Open Market Committee's (FOMC) longer-run goal of 2 percent. The price index for personal consumption expenditures (PCE) rose 1¼ percent over the 12 months ending in May, up from an increase of only 1 percent a year earlier. The PCE price index excluding food and energy items rose 1½ percent over the past 12 months. Meanwhile, both survey- and market-based measures of longer-term inflation expectations have remained stable.

Real gross domestic product is reported to have declined in the first quarter of this year, but a number of recent indicators suggest that economic activity rebounded in the second quarter. The pace of economic growth abroad also appears to have quickened in the second quarter following weakness earlier this year, which should provide support for export sales. Moreover, expansion in economic activity continues to be supported by ongoing job gains, a waning drag from fiscal policy, and accommodative financial conditions. However, the housing sector has shown little recent progress. While it has recovered notably from its earlier trough, activity in the sector

leveled off in the wake of last year's increase in mortgage rates, and readings this year have, overall, continued to be disappointing.

The Committee expects that, with appropriate policy accommodation, economic activity will expand at a moderate pace and labor market conditions will continue to move gradually toward levels that the Committee judges consistent with its dual mandate of maximum employment and price stability. In addition, the Committee anticipates that with stable inflation expectations and strengthening economic activity, inflation will, over time, return to the Committee's 2 percent objective. Those expectations are reflected in the June Summary of Economic Projections, which is included as Part 3 of this report.

Financial conditions have generally remained supportive of economic growth. Longer-term interest rates have continued to be low by historical standards, and over the first half of the year those interest rates moved down significantly in the United States as well as in most other advanced economies. Overall, borrowing conditions for households have continued to slowly improve amid rising house and equity prices and the faster pace of employment growth so far this year. Credit flows to large nonfinancial businesses have remained strong, and small business lending activity has shown signs of improvement in recent months.

With respect to financial stability, signs of risk-taking that could leave segments of the U.S. financial sector vulnerable to possible adverse events have increased modestly this year, albeit from a subdued level. Prices for real estate, equities, and corporate debt have risen and valuation measures have increased, but valuations remain roughly in line with historical norms. Signs of excesses that could lead to higher future defaults and losses have emerged in some sectors, including

for speculative-grade corporate bonds and leveraged loans. At the same time, financial firms' use of short-term wholesale funding has not increased materially and the capital and liquidity position of the banking sector continued to improve. The Federal Reserve and other agencies took further supervisory and regulatory steps to improve resilience, including conducting the 2014 stress tests of the largest bank holding companies (BHCs); finalizing rules to strengthen prudential standards for the largest domestic BHCs and for the U.S. operations of foreign banking firms; and raising leverage ratio standards for the largest, most interconnected firms.

To support continued progress toward maximum employment and price stability, the FOMC has maintained a highly accommodative stance of monetary policy. Specifically, the Committee has kept its target range for the federal funds rate at 0 to ¼ percent; updated its forward guidance regarding the path of the federal funds rate; and continued to increase its sizable holdings of longer-term securities, though at a gradually diminishing pace. In particular, the Committee made additional measured reductions at each of its first four regularly scheduled meetings in 2014 in the monthly pace of its asset purchases. The FOMC also stated at each meeting that, if incoming information continued to broadly support the Committee's assessment of the economic outlook, the Committee would likely reduce the pace of asset purchases in further measured steps at future meetings. However, the Committee also noted that its asset purchases are not on a preset course, and that decisions about their pace will remain contingent on the economic outlook.

The FOMC has provided forward guidance for the federal funds rate based on its assessment of economic and financial conditions. As 2014 began, the Committee's forward rate guidance

included quantitative thresholds relating to the unemployment rate and inflation. However, with the unemployment rate having neared its 6½ percent threshold, the Committee decided at its March meeting to replace the numerical thresholds with a qualitative characterization of its approach to determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate. Specifically, the Committee stated that it will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation, taking into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends. The Committee additionally stated its anticipation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

As part of prudent planning, the Federal Reserve has continued to prepare for the eventual normalization of the stance and conduct of monetary policy. The FOMC remains confident that it has the tools it needs to raise short-term interest rates when the time is right and to achieve the desired level of short-term interest rates thereafter, even while the Federal Reserve is holding a very large balance sheet. The Committee intends to continue its discussions about policy normalization at upcoming meetings while it proceeds with testing the operational readiness of its tools; it expects to provide to the public more information about its normalization plans later this year.

PART 1

RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

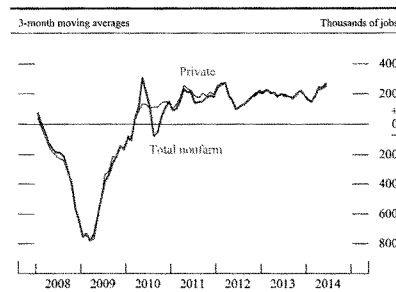
Labor market conditions continued to improve over the first half of this year. Gains in payroll employment since the start of the year have averaged about 230,000 jobs per month, up a little from the average pace in 2013, and the unemployment rate declined to 6.1 percent in June, the lowest rate recorded in more than five years. Nevertheless, the jobless rate is still above Federal Open Market Committee (FOMC) participants' estimates of the longer-run normal rate. Other measures of labor utilization, as well as the continued slow increases in most measures of labor compensation, generally corroborate the view that significant slack remains in the labor market. Inflation, as measured by the price index for personal consumption expenditures (PCE), averaged 1¾ percent over the 12 months ending in May, higher than the unusually low level over the preceding 12 months but still somewhat below the Committee's 2 percent objective. Meanwhile, both survey- and market-based measures of longer-term inflation expectations have remained quite stable. Real gross domestic product (GDP) was reported to have decreased in the first quarter of this year, but the available information for the second quarter suggests that the decline was transitory. One area of concern, however, is the housing sector, where activity softened by more, relative to its earlier trajectory, than would have been expected based on last year's rise in mortgage interest rates. Financial conditions have generally remained supportive of economic growth. Longer-term interest rates in the United States as well as in most other advanced economies have partially reversed last year's increases, and borrowing conditions for households and small businesses have slowly improved, while credit flows to large nonfinancial corporations have remained strong.

Domestic Developments

Labor market conditions have strengthened further . . .

The labor market continued to improve in the first half of 2014. Payroll employment has increased by an average of about 230,000 per month so far this year, higher than the average gain in 2013 (figure 1). The unemployment rate continued to trend down, declining from 6.7 percent in December 2013 to 6.1 percent in June of this year, while the labor force participation rate was little changed, on net, over the first half of this year after having moved down considerably in the second half of last year (figure 2). The unemployment rate has declined nearly 4 percentage points from its peak in 2009, although it remains elevated when judged against FOMC participants' estimates of the longer-run normal rate. Payrolls have reversed the cumulative job losses that occurred over the last recession, though that recovery has been achieved in the context of a larger population and labor force.

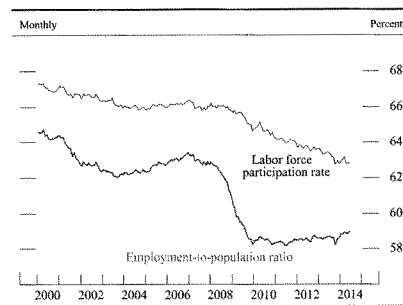
1. Net change in payroll employment



NOTE: The data extend through June 2014.
SOURCE: Department of Labor, Bureau of Labor Statistics.

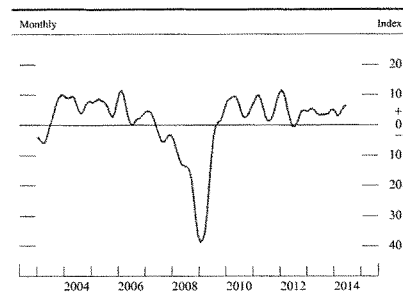
4 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

2. Labor force participation rate and employment-to-population ratio



NOTE: Both series are a percent of the population aged 16 and over.
SOURCE: Department of Labor, Bureau of Labor Statistics.

3. Change in labor market conditions index



NOTE: Data are three-month moving averages. The index is estimated using a dynamic factor model to measure the primary source of common variation among 19 labor market indicators. The index has a mean of zero and a standard deviation of 100; an increase indicates an improvement in labor market conditions.

SOURCE: Federal Reserve Board staff estimates based on data from the Conference Board; Department of Labor, Bureau of Labor Statistics and Employment and Training Administration; National Federation of Independent Business.

An index constructed by Board staff that aims to summarize movements in a broad array of labor market indicators also suggests that labor market conditions have strengthened further this year (figure 3).¹ While increases in that index slowed a touch at the beginning of this year, partly reflecting the effects of the unseasonably cold and snowy weather this winter, the pace has picked up again in recent months.

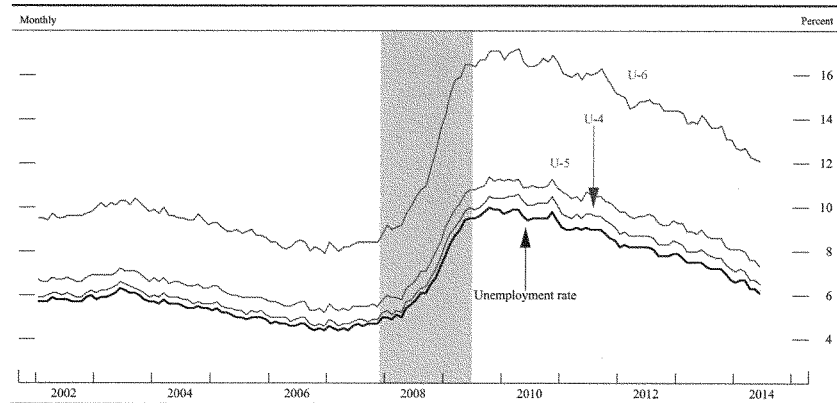
... but significant slack remains ...

Notwithstanding those improvements, various labor market indicators suggest that a significant degree of slack remains in labor utilization. For instance, measures of labor underutilization that incorporate broader definitions of unemployment are still well above their pre-recession levels, even though they have moved down further this year (figure 4). The proportion of workers employed part time because they are unable to find full-time work has similarly declined but remains elevated, and hiring and quit rates are still below their pre-recession norms. Moreover, the median duration of unemployment is still well above its long-run average.

The declines in the participation rate during the past few years, within the context of a strengthening labor market, also could be an indication of continuing labor market slack. To be sure, movements in the participation rate partly reflect the changing demographic composition of the population, most notably the increasing share of older persons, who have lower-than-average participation rates because they are more likely to be retired. As such, many of those exits from the labor force probably would have occurred even if

1. For details on the construction of the labor market conditions index, see Hess Chung, Bruce Fallick, Christopher Nekarda, and David Ratner (2014), "Assessing the Change in Labor Market Conditions," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, May 22), www.federalreserve.gov/econresdata/notes/feds-notes/2014/assessing-the-change-in-labor-market-conditions-20140522.html.

4. Measures of labor underutilization



NOTE: U-4 measures total unemployed plus discouraged workers, as a percent of the labor force plus discouraged workers. Discouraged workers are a subset of marginally attached workers who are not currently looking for work because they believe no jobs are available for them. U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force. Marginally attached workers are not in the labor force, want and are available for work, and have looked for a job in the past 12 months. U-6 measures total unemployed plus all marginally attached workers plus total employed part time for economic reasons, as a percent of the labor force plus all marginally attached workers. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

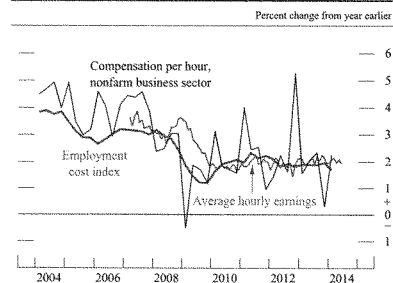
SOURCE: Department of Labor, Bureau of Labor Statistics.

the labor market had been stronger. However, some exits are likely occurring because the prolonged period of high unemployment has led some individuals to give up their job search, and such dynamics could have harmful consequences for economic activity in the long run.

... and wage growth has remained tepid

Continued slow increases in most measures of labor compensation offer further evidence of labor market slack. Compensation per hour in the nonfarm business sector is estimated to have risen at a modest pace of 2¼ percent over the four quarters ending in the first quarter of this year; the employment cost index for private industry workers rose at an annual rate of only 1¼ percent in the same period; and average hourly earnings rose about 2 percent over the 12 months ending in June, little changed from the average rate of increase in hourly earnings during the past several years (figure 5). Over the past five years, the various measures of nominal hourly compensation

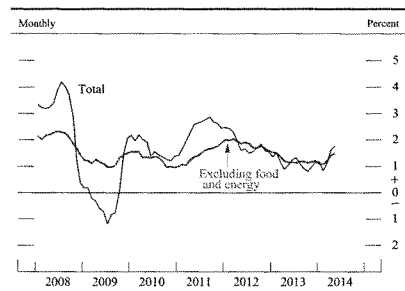
5. Measures of change in hourly compensation



NOTE: For nonfarm business compensation, change is over four quarters; for the employment cost index, change is over the 12 months ending in the last month of each quarter; for average hourly earnings, change is over the 12 months ending in June. The average hourly earnings data series begins in March 2007.

SOURCE: Department of Labor, Bureau of Labor Statistics.

6. Change in the chain-type price index for personal consumption expenditures



NOTE: The data extend through May 2014; changes are from one year earlier.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

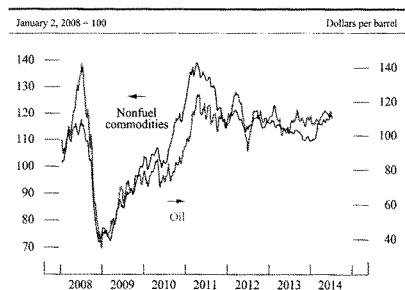
have increased roughly 2 percent per year, on average, and after adjusting for inflation, growth of real compensation has fallen short of the gains in productivity over this period.

Consumer price inflation has moved up . . .

Inflation has moved higher this year following unusually low readings in 2013. The PCE price index rose $1\frac{1}{4}$ percent over the 12 months ending in May, up from the 1 percent increase recorded over the preceding 12 months (figure 6). The PCE price index excluding food and energy items rose $1\frac{1}{2}$ percent over the 12 months ending in May, slightly less than the overall index. The FOMC continues to judge that inflation at the rate of 2 percent, as measured by the annual change in the PCE price index, is most consistent over the longer run with the Federal Reserve's statutory mandate. Thus, inflation remained somewhat below the Committee's goal. Some of the factors that contributed to the unusually low inflation in 2013, such as the softness seen in non-oil import prices, have begun to unwind and are pushing up inflation a little this year. More generally, however, with wages growing slowly and raw materials prices generally flat or moving downward, firms are not facing much in the way of cost pressures that they might otherwise try to pass on.

A portion of the recent increase in inflation reflects movements in energy and food prices that appear transitory. Consumer energy prices rose at an annual rate of nearly 6 percent over the 12 months ending in May, partly reflecting strong demand for electricity and natural gas during the cold winter. Global oil prices have been remarkably stable for much of the past year, with oil prices remaining mostly in a narrow range of between about \$105 and \$110 per barrel and moving above that range only temporarily in reaction to events in Iraq (figure 7). Meanwhile, adverse growing conditions in both the United States and abroad have pushed up wholesale prices for various food commodities—including

7. Prices of oil and nonfuel commodities



NOTE: The data are weekly averages of daily data through July 10, 2014. The price of oil is the spot price of Brent crude oil, and the price of nonfuel commodities is an index of 23 primary-commodity prices.

SOURCE: CRB Data Center; Final Markets, Commodity Research Bureau.

corn, wheat, and coffee—and these higher raw materials prices have led to somewhat larger increases in consumer food prices this year.

... but inflation expectations have changed little

Survey- and market-based measures of inflation expectations at medium- and longer-term horizons have remained quite stable throughout the recent period. Readings on inflation expectations 5 to 10 years ahead, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers, have continued to move within a narrow range (figure 8). In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation in the second quarter for the annual rate of increase in the PCE price index over the next 10 years was 2 percent, similar to its level in recent years. Meanwhile, market-based measures of medium- (5-year) and longer-term (5-to-10-years-ahead) inflation compensation derived from differences between yields on nominal Treasury securities and Treasury Inflation-Protected Securities have also remained within their respective ranges observed over the past few years (figure 9).

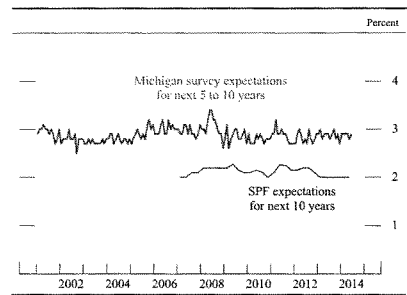
The first-quarter decline in real GDP appears to have been transitory

Measures of real aggregate output—that is, GDP and gross domestic income—were both reported to have declined in the first quarter of this year (figure 10).² Part of the weakness in output was likely related to severe weather early in the year.³ But much of the drop in first-quarter GDP reflected

2. Gross domestic income measures the same economic concept as GDP, and the two estimates would be identical if they were measured without error.

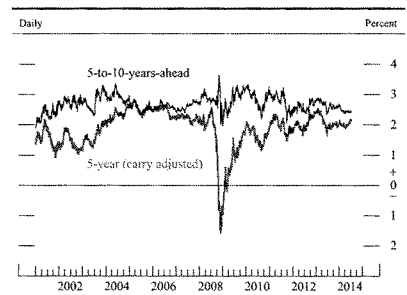
3. Manufacturing output was held down by both snow and extreme cold in parts of the country in January and February. In March, output appears to have been boosted significantly by manufacturers making up for earlier production curtailments. Factory output subsequently dropped back in April, consistent with the view that this makeup production had been achieved.

8. Median inflation expectations



NOTE: The Michigan survey data are monthly. The SPF data for inflation expectations for personal consumption expenditures are quarterly and extend from 2007:Q1 through 2014:Q2.
SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers; Survey of Professional Forecasters (SPF).

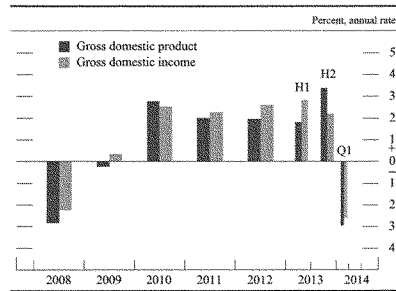
9. Inflation compensation



NOTE: Inflation compensation is the difference between yields on nominal Treasury securities and Treasury Inflation-Protected Securities (TIPS) of comparable maturities, based on yield curves fitted to off-the-run nominal Treasury securities and on- and off-the-run TIPS. The 5-year measure is adjusted for the effect of indexation lags.
SOURCE: Federal Reserve Bank of New York; Barclays TIPS Pricing; Federal Reserve Board staff estimates.

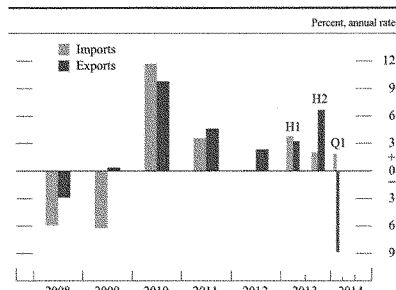
8 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

10. Change in real gross domestic product and gross domestic income



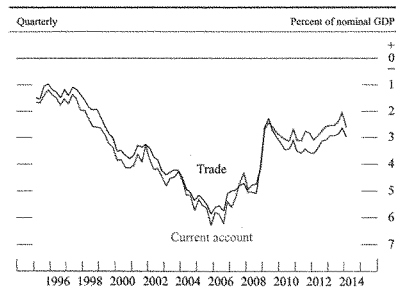
SOURCE: Department of Commerce, Bureau of Economic Analysis.

11. Change in real imports and exports of goods and services



SOURCE: Department of Commerce, Bureau of Economic Analysis.

12. U.S. trade and current account balances



SOURCE: Department of Commerce, Bureau of Economic Analysis.

unusually large swings in inventories and net exports, two volatile categories for which the available monthly data point to a rebound in the second quarter. In addition, a number of recent indicators of second-quarter spending, including motor vehicle sales, retail sales, and shipments of capital goods, suggests that the overall pace of consumer and business spending also picked up in the second quarter. Expansion in real activity continues to be supported by ongoing job gains, a waning drag from fiscal policy, and accommodative financial conditions. However, activity in the housing sector has yet to show persistent gains since it slowed in the wake of last year's rise in mortgage interest rates.

Export declines weighed heavily on first-quarter GDP

Real exports of goods and services declined at an annual rate of about 9 percent in the first quarter of 2014 (figure 11), coinciding with a global slowdown in trade. The decline partly reflected a retrenchment in two volatile categories, petroleum and agriculture, that had surged in the fourth quarter of 2013. With real imports of goods and services advancing in the first quarter, albeit slowly, net exports subtracted 1½ percentage points—an unusually large amount—from overall GDP growth. However, available data for April and May indicate that exports rebounded in the second quarter, and net exports will likely be more supportive of growth in the second quarter.

The current account deficit widened somewhat in the first quarter of this year after having narrowed further over 2013; however, measured relative to nominal GDP, the deficit remains near its narrowest readings since the late 1990s (figure 12). In the second half of 2013, the current account deficit continued to be financed mostly by purchases of Treasury and corporate securities by both foreign official investors and foreign private investors (figure 13). Foreign private purchases remained strong in the first quarter of 2014, but official

inflows weakened as conditions in emerging market economies (EMEs) worsened early in the quarter.

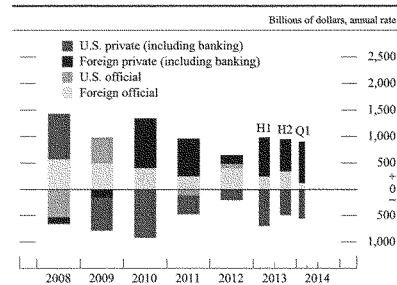
Gains in wealth and income are supporting consumer spending

Smoothing through weather-related fluctuations, consumer spending was reported to have risen at a modest annual rate of 1 percent over the first five months of this year, while disposable personal income advanced at a stronger pace of 2¼ percent over the same period (figure 14).⁴ The faster pace of job gains so far this year has helped improve the economic prospects of many households and has contributed to a pickup in the pace of aggregate income growth, though it is not yet clear how widely these income gains have been shared across the population. In addition, personal tax payments and social security contributions, which surged last year as a consequence of higher federal payroll and income taxes, are no longer weighing as heavily on income growth.

Consumption growth this year also has been supported by ongoing gains in household net worth. House prices, which are of particular importance for the wealth position of many middle-income households, have continued to move higher, with the CoreLogic national index showing a rise of almost 9 percent over the 12 months ending in May (figure 15). Meanwhile, the value of corporate equities has risen more than 15 percent over the past year and has added substantially to net wealth. Reflecting those solid gains, aggregate household net wealth is estimated to have approached 6½ times the value of disposable

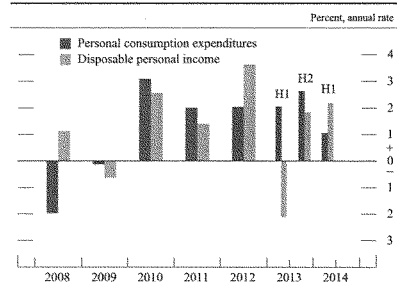
4. In its third release of quarterly GDP, the Bureau of Economic Analysis reported that consumer spending on health-care services declined in the first quarter. This estimate reflected the incorporation of census data from the U.S. Census Bureau's Quarterly Services Survey, which showed a decline in the revenues of health-care providers. By contrast, a variety of other indicators, including data on Medicaid payments as well as health-care exchange enrollments and subsidies related to the Affordable Care Act, are suggestive of greater strength in health-care spending.

13. U.S. net financial inflows



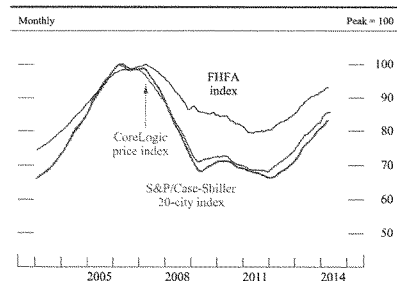
NOTE: Negative numbers indicate a balance of payments outflow, generated when U.S. residents, on net, purchase foreign assets or when foreign residents, on net, sell U.S. assets. A negative number for "U.S. private" or "U.S. official" indicates an increase in U.S. residents' holdings of foreign assets. U.S. official flows include the foreign currency acquired when foreign central banks draw on their swap lines with the Federal Reserve.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

14. Change in real personal consumption expenditures and disposable personal income



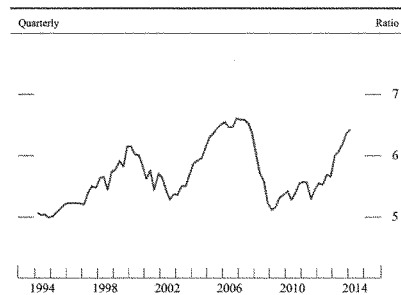
NOTE: The reading for 2014:H1 is the annualized May/Q4 change.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

15. Prices of existing single-family houses



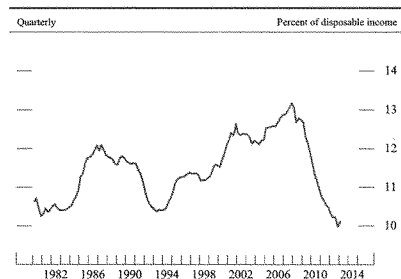
NOTE: The S&P/Case-Shiller and FHFA data extend through April 2014. The CoreLogic data extend through May.
SOURCE: Federal Housing Finance Agency (FHFA); Case-Shiller data via S&P Capital IQ Solutions' Capital IQ Platform; staff calculations based on data provided by CoreLogic.

16. Wealth-to-income ratio



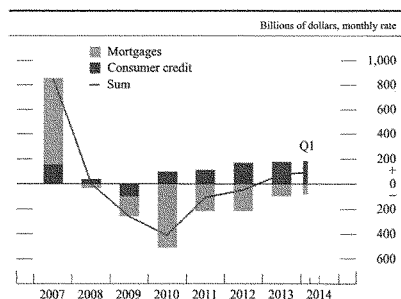
NOTE: The ratio is household net worth to disposable personal income.
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

17. Household debt service



NOTE: Debt service payments consist of estimated required payments on outstanding mortgage and consumer debt.
SOURCE: Federal Reserve Board, statistical release, "Household Debt Service and Financial Obligations Ratios."

18. Changes in household debt



NOTE: Changes are calculated from year-end to year-end.
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

personal income in the first quarter of this year, the highest level observed for that ratio since 2007 (figure 16).

Coupled with low interest rates, the rise in incomes has enabled many households to reduce their debt payment burdens. The household debt service ratio—that is, the ratio of required principal and interest payments on outstanding household debt to disposable personal income—dropped further in the first quarter of this year and stood at a very low level by historical standards (figure 17).

Borrowing conditions for households are slowly improving . . .

The improvements in households' balance sheets so far this year have been accompanied by a gradual easing in borrowing conditions. For example, large banks reported a net easing of standards for home purchase loans to prime borrowers in the Federal Reserve Board's April 2014 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS).⁵ SLOOS responses also indicated a net easing in credit standards for consumer loans. Even so, mortgage lending standards have remained tight for many households; indeed, standards on nontraditional mortgage loans were reported to have tightened further in the April survey. Likely reflecting, in part, the increased willingness to lend, the rate of decline in mortgage debt has slowed so far this year, and growth in other consumer credit has been robust (figure 18).

. . . but consumer confidence remains tepid

Despite the strengthening in household incomes and wealth, indicators of consumer sentiment still appear somewhat depressed compared with their longer-run norms. The Michigan survey's index of consumer

5. The SLOOS is available on the Board's website at www.federalreserve.gov/boarddocs/snloansurvey.

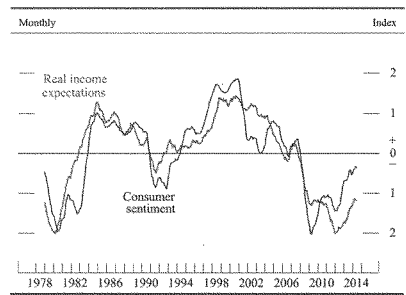
sentiment—which incorporates households’ views about their own financial situations as well as broader economic conditions—has recovered noticeably from its recessionary low but has changed little, on net, over the past year (figure 19). The responses to a separate survey question about income expectations display a similar pattern: Although an index of households’ expectations of real income changes in the year ahead has recovered somewhat since 2011, it remains substantially below the historical average and suggests a more guarded outlook than the headline index.

Business investment has been lackluster, . . .

After recording modest gains in 2013, business fixed investment ticked down in the first quarter of this year, as a large decline in spending on nonresidential structures was partly offset by a small increase in outlays for equipment and intangible (E&I) capital (figure 20). Although the expiration of a tax provision allowing 50 percent bonus depreciation may have pulled some capital investment forward into late 2013, looking over a longer period, the pattern of investment outlays over the past year and a half appears broadly consistent with the sluggish pace of business output growth during the period. Nevertheless, various forward-looking indicators, such as business sentiment and earnings expectations of capital goods producers, paint a fairly upbeat picture and point to a pickup in the growth of E&I investment.

Business investment in structures has been relatively weak this year, as demand for nonresidential buildings continues to be restrained by high vacancy rates for existing properties and tight financing conditions for new construction. However, the level of investment in drilling and mining structures is extremely high by historical standards, a reflection of the boom in oil and natural gas extraction.

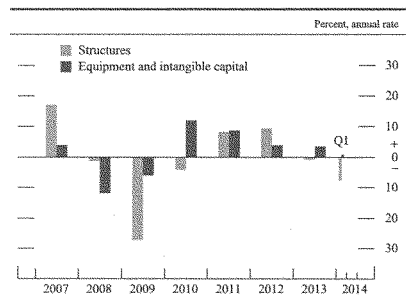
19. Consumer sentiment indexes



NOTE: Data are 12-month moving averages. Average values since 1978 equal zero. Real income expectations are calculated as the net percent of survey respondents expecting family income to go up more than prices during the next year or two.

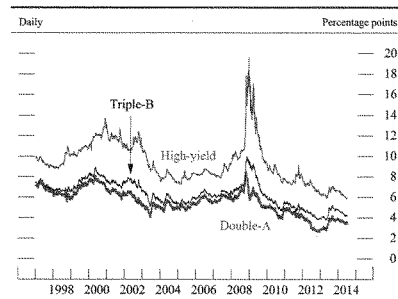
SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers.

20. Change in real business fixed investment



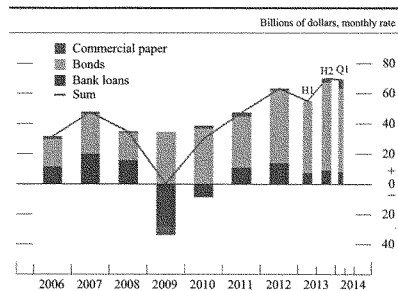
SOURCE: Department of Commerce, Bureau of Economic Analysis.

21. Corporate bond yields by securities rating



NOTE: The yields shown are yields on 10-year bonds.
SOURCE: BofA Merrill Lynch Global Research, used with permission.

22. Selected components of net financing for nonfinancial businesses



NOTE: The data for the components except bonds are seasonally adjusted.
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

... even as corporate borrowing has expanded and loan terms and standards appear to be easing

The financial condition of large nonfinancial firms has remained strong so far this year, with profitability high and the default rate on nonfinancial corporate bonds generally low. Nonfinancial firms have continued to raise funds at a robust pace, given strong corporate credit quality and historically low interest rates on corporate bonds (figure 21). Indeed, bond issuance by both investment- and speculative-grade nonfinancial firms has been strong (figure 22).

Moreover, credit availability in business loan markets has shown further improvement. According to the April SLOOS, banks again eased standards on commercial and industrial (C&I) loans to firms of all sizes in the first quarter, and many banks have eased price-related and other terms on such loans. In addition, according to the Federal Reserve Board's May 2014 Survey of Terms of Business Lending, loan rate spreads over market interest rates for newly originated C&I loans have continued to decline. In this environment, C&I loans on banks' books and commercial paper outstanding both have registered solid increases. Issuance of leveraged loans continued to be rapid in the first half of 2014, and issuance of collateralized loan obligations reached very high levels in the period from February to April.⁶ Small business lending activity has picked up as well in recent months, likely reflecting some increase in credit availability as well as a strengthening in businesses' demand for credit.

In the commercial real estate (CRE) sector, loans continued to expand at a moderate

6. New collateralized loan obligation (CLO) deals over this period were reportedly structured to address certain restrictions in the Volcker rule. In addition, the Federal Reserve Board announced that bank holding companies have until July 21, 2017, to disinvest from non-Volcker-compliant CLOs originated prior to the end of 2013. The extension for complying with the requirement reportedly alleviated the risk of forced liquidations of such instruments in the near term.

pace, and increases in banks' CRE loans remained widespread across all major CRE segments (that is, loans secured by nonfarm nonresidential properties, multifamily residential properties, and construction and land development loans). According to the April SLOOS, standards on CRE loans extended by banks also eased in the first quarter. Special survey questions asked about changes in terms on CRE loans over the past year, and many banks reported having eased interest rate spreads and increased maximum loan sizes and terms to maturity. Nevertheless, standards for construction and land development loans appear to have remained relatively tight.

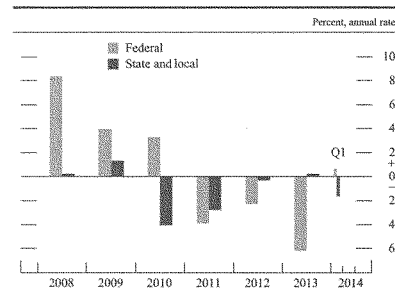
The drag from federal fiscal restraint is waning . . .

Fiscal policy has been a contractionary force through most of the past three years and was especially so in 2013, when the temporary payroll tax cut expired, taxes increased for high-income households, and federal purchases were pushed down by the sequestration and caps on discretionary spending (figure 23). Moreover, in the fourth quarter of last year, disruptions related to the government shutdown led to a sharp but temporary reduction in federal purchases. For 2013 as a whole, real federal purchases (as measured in the national income and product accounts) fell 6¼ percent, twice as large as the average decline in the previous two years.

This year, however, fiscal policy has become somewhat less restrictive for GDP growth, as the effects of the 2013 tax and spending changes are fading. While the expiration of emergency unemployment compensation at the beginning of the year has exerted a drag on consumer spending, medical benefits provided for under the Affordable Care Act will likely support increased consumption of medical services.

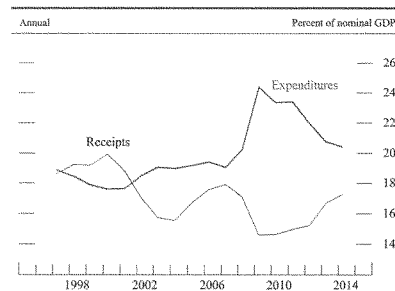
With few major changes in tax policy in 2014, federal receipts have edged up to around 17 percent of GDP, their highest level since before the recession (figure 24). Meanwhile, nominal federal outlays as a share of GDP

23. Change in real government expenditures on consumption and investment



SOURCE: Department of Commerce, Bureau of Economic Analysis.

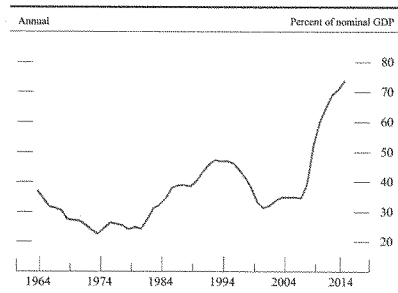
24. Federal receipts and expenditures



NOTE: Through 2013, receipts and expenditures are for fiscal years (October to September); gross domestic product (GDP) is for the four quarters ending in Q3. For 2014, receipts and expenditures are for the 12 months ending in June, and GDP is the average of 2013:Q4 and 2014:Q1. Receipts and expenditures are on a unified-budget basis.

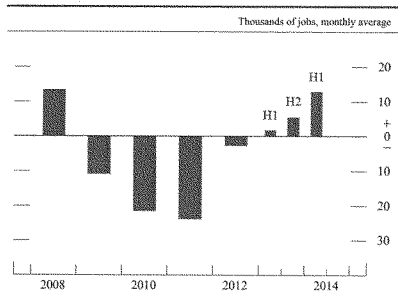
SOURCE: Office of Management and Budget.

25. Federal government debt held by the public



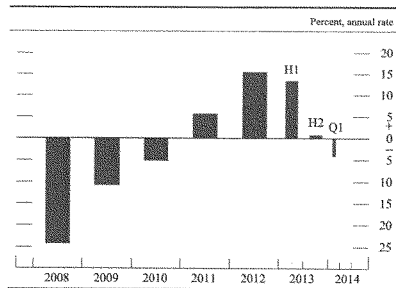
Note: The data are for the third quarter of each year. The data for gross domestic product (GDP) are at an annual rate.
 Source: Department of Commerce, Bureau of Economic Analysis; Department of the Treasury, Financial Management Service.

26. State and local government employment change



Source: Department of Labor, Bureau of Labor Statistics.

27. Change in residential investment



Source: Department of Commerce, Bureau of Economic Analysis.

have continued to trend downward but have remained above the levels observed before the start of the recession. Thus, the federal unified budget deficit has narrowed again this year; the Congressional Budget Office projects that the budget deficit for fiscal year 2014 as a whole will be 3 percent of GDP, compared with the fiscal 2013 deficit of 4 percent of GDP. Overall federal debt held by the public has continued to rise, and the ratio of nominal federal debt to GDP moved up to near 75 percent in early 2014 (figure 25).

... and state and local government expenditures are turning up

At the state and local level, the ongoing strengthening in economic activity, as well as previous spending cuts, has helped foster a gradual improvement in the budget situations of most jurisdictions. Consistent with improving sector finances, states and localities have been expanding their workforces; employment accelerated in the first half of the year after rising modestly in the second half of 2013 (figure 26). Construction expenditures by those governments, however, have yet to show a sustained recovery.

The recovery in the housing market has lost traction

After proceeding briskly in 2012 and the first half of 2013, the recovery in residential construction seems to have faltered. Real residential investment declined for two successive quarters around the turn of the year, and the available data point to only a modest gain in the second quarter (figure 27). The renewed softness of late has proven more extensive and persistent than would have been expected given the rise in mortgage interest rates around the middle of last year (see the box "The Slow Recovery of Housing Activity"). That said, household formation remains depressed relative to demographic norms, and the ongoing improvement in labor market conditions could help spur a more decisive return to those norms.

Productivity growth has been modest

In general, gains in labor productivity have been modest in recent years. Output per hour in the nonfarm business sector has risen at an annual rate of less than 1½ percent since 2007, well below the pace of gains observed over the late 1990s and early 2000s (figure 28). The relatively slow pace of productivity growth likely reflects, in part, the sustained weakness in capital investment over the recession and recovery period, and productivity gains may be better supported in the future as outlays for productivity-enhancing capital equipment strengthen.

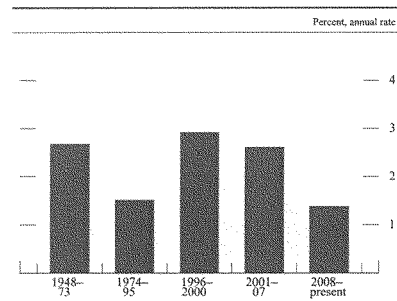
Financial Developments

The expected path for the federal funds rate edged down

Market-based measures of the expected path of the federal funds rate through late 2017 edged down, on balance, over the first half of the year. After accounting for transitory factors such as weather, market participants appeared to judge the incoming economic data as somewhat better than they had expected but as still continuing to point to subdued inflationary pressures and an accommodative policy stance by the FOMC. The relatively small movements of the market-based measures are consistent with the results of the most recent Survey of Primary Dealers and the pilot survey of market participants, each conducted just prior to the June FOMC meeting by the Open Market Desk at the Federal Reserve Bank of New York. Those surveys suggest that dealers and buy-side respondents both anticipate that the initial increase in the target federal funds rate from its current range will occur in the third quarter of 2015, slightly earlier than dealers had anticipated at the beginning of this year and about the same as what buy-side respondents had anticipated.⁷

7. The results of the Survey of Primary Dealers and of the pilot survey of market participants are available on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/primarydealer_survey_questions.html and www.newyorkfed.org/markets/pilot_survey_market_participants.html, respectively.

28. Change in output per hour



NOTE: The data are for the nonfarm business sector. Changes for the first four periods are measured from Q4 of the year immediately preceding the period through Q4 of the final year of the period. The final period is measured from 2007:Q4 through 2014:Q1.

SOURCE: Department of Labor, Bureau of Labor Statistics.

The Slow Recovery of Housing Activity

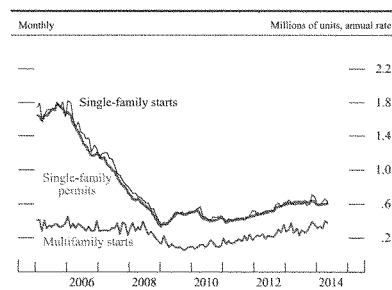
Partly because of its sensitivity to interest rates, investment in residential structures has often played an important role in jump-starting economic recoveries, even though it has constituted less than 5 percent of gross domestic product (GDP), on average, since World War II. For example, in 1983, coming out of a severe double-dip recession, residential investment rose 50 percent and contributed 1.7 percentage points to GDP growth. But the recent recovery period has been quite different from previous episodes, even with interest rates at historically low levels. In 2010 and 2011, the first two years of the recovery, residential investment contributed essentially nothing, on average, to the growth of real GDP. Even after rising noticeably in 2012 and the first half of 2013, real residential investment remains 45 percent below its pre-recession peak. The lack of a rapid housing recovery has also affected the labor market: Employment in the construction sector is still more than 1.6 million lower than the average level in 2006.

The failure of residential construction to significantly boost the current recovery likely reflects a number of headwinds. First, a much tighter supply of mortgage credit in the aftermath of the housing bubble, particularly for prospective borrowers with low credit scores, has crimped demand for owner-occupied housing. Second, the slow recovery of the labor market has significantly reduced the pace of new household formation, as young adults in particular have become more likely to live with their parents or other relatives. Third, the relatively rapid recovery of house prices, even as construction remains far below trend, suggests that constraints on new housing supply also have played a role. These constraints may include shortages of skilled labor and buildable lots, implying that some time may be required to shift resources back into the sector.

Despite these headwinds, housing activity began to recover in late 2011, supported by declining unemployment, record-low longer-term interest rates, and improving confidence in the economic recovery. Single-family housing starts and sales of existing homes both trended up in 2012 and continued to do so through mid-2013 (figures A and B). During this period, multifamily construction recovered to its average pace in the 1990s and early 2000s, supported by a shift in the composition of demand toward rental units driven by many of the same factors that have constrained the single-family, owner-occupied sector. All told, from the fourth quarter of 2011 through the second quarter of 2013, residential investment (as measured in the national income and product accounts) grew at an average annual rate of nearly 15 percent. All of the major components of residential investment—including construction of new single-family and multifamily homes, improvements to existing structures, and brokers' commissions and fees—made sizable positive contributions to investment growth over the period (figure C).

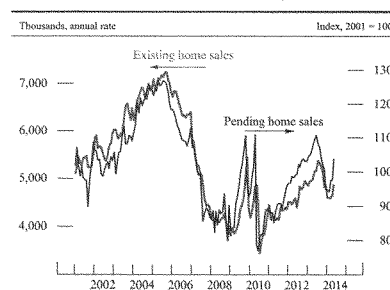
In spite of this positive momentum, the recovery stalled in mid-2013 in the wake of a spike in mortgage interest rates that sharply reduced housing affordability (figure D). Permits for single-family construction—the best gauge of underlying activity in the sector—have been roughly flat over the past year. Meanwhile, existing home sales have fallen almost 10 percent from their recent highs. Residential investment turned sharply negative for two successive quarters around the turn of the year. Measures of builder, real estate agent, and homebuyer sentiment have also deteriorated. Arguably, the only bright spot of late has been the data on multifamily starts and permits, which are noisy but appear to have continued to trend higher on net.

A. Private housing starts and permits



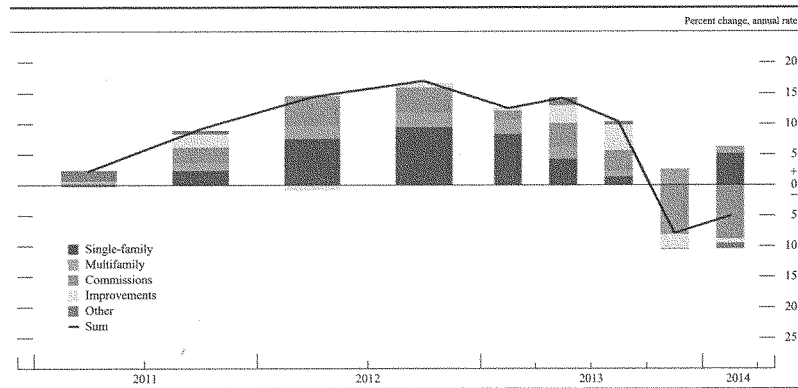
NOTE: The data extend through May 2014.
SOURCE: Department of Commerce, Bureau of the Census.

B. Pending home sales index and existing home sales



NOTE: The data are monthly and extend through May 2014. Total existing home sales includes single-family and condo and co-op sales.
SOURCE: National Association of Realtors.

C. Contribution to growth in total residential investment



SOURCE: Department of Commerce, Bureau of Economic Analysis.

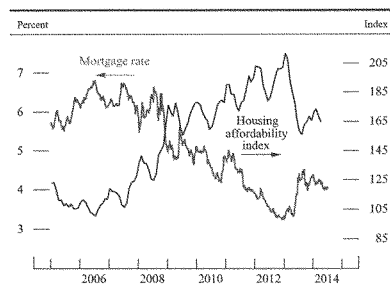
While the most obvious explanation for the weakness in the housing market over the past year is the run-up in mortgage rates during the spring and summer of 2013, it seems unlikely that interest rates are the whole story. Historical correlations between mortgage rates and residential investment suggest that the effects of last year's run-up should have begun to fade by now, but housing activity has yet to pick up. Moreover, since last summer, mortgage rates have retraced a portion of their earlier increases without any noticeable improvement in activity.

Even so, it is possible that the interest rate spike may have had a larger and longer-lasting effect than

would be suggested by historical experience, especially because an interest rate rise of that magnitude, with rates so low and housing activity so depressed, is unprecedented. Alternatively, ongoing increases in house prices may indicate that constraints on the supply of new housing are binding more significantly than seemed to be the case in 2012, when residential investment rose fairly rapidly. Finally, the downturn in existing home sales, which has had a particularly pronounced effect on total residential investment via brokers' commissions, may reflect factors specific to the resale market; in particular, short sales and sales of foreclosed properties have declined markedly over the past couple of years.

Regardless of what explains the recent weakness, the level of new home construction likely remains much too low to be sustainable. Prior to the housing boom and bust, an average of roughly 1½ million housing units were started per year.¹ In comparison, only about 1 million units were started in 2013, despite the recovery of multifamily starts to pre-recession levels. It is difficult to judge when construction will resume its upward trend or, given all of the changes in the housing market in recent years, at what level it will stabilize. That said, the Census Bureau projects that the adult population will continue to grow by roughly 2 million per year over the next two decades; with that rate of population growth, the pace of construction seems likely to rise from current levels.

D. Mortgage rates and housing affordability

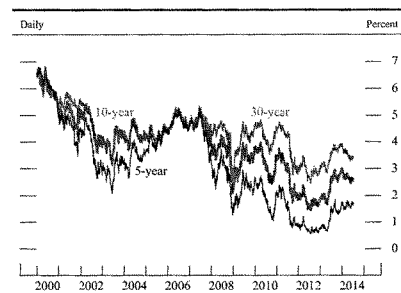


NOTE: The housing affordability index data are monthly through April 2014 and the mortgage rate data are weekly through July 9, 2014. At an index value of 100, a median-income family has exactly enough income to qualify for a median-priced home mortgage. Housing affordability is seasonally adjusted by Board staff.

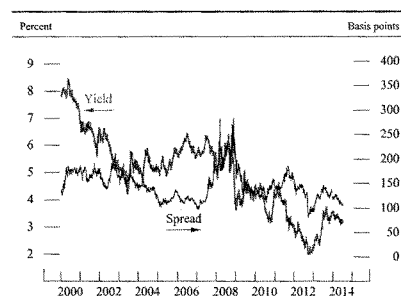
SOURCE: For housing affordability index, National Association of Realtors; for mortgage rate, Freddie Mac Primary Mortgage Market Survey and Loansifter.

1. This figure is calculated using data from 1960 to 2000 and includes single-family and multifamily construction as well as shipments of new mobile homes.

29. Yields on nominal Treasury securities



30. Yield and spread on agency mortgage-backed securities



Finally, while some forward measures of policy rate uncertainty have risen, overall policy rate uncertainty has generally remained relatively low.

However, Treasury yields declined significantly, especially at longer maturities, as have sovereign bond yields in other advanced economies

After rising notably over the spring and summer months of 2013, yields on longer-term Treasury securities drifted down over the first half of 2014 and now stand at fairly low levels by historical standards (figure 29). In particular, while the yield on 5-year nominal Treasury securities edged down only about 5 basis points from its level at the end of December 2013, the yields on the 10- and 30-year securities decreased about 50 basis points and 60 basis points, respectively. The decline in longer-term yields reflects a notable reduction in longer-horizon forward rates, with the 5-year-forward rate 5 years ahead dropping about 105 basis points since year-end. Five-year-forward inflation compensation over this period declined 20 basis points, implying that much of this reduction in nominal forward rates was concentrated in forward real rates. Yields on 30-year agency mortgage-backed securities (MBS) decreased about 35 basis points, on balance, over the same period (figure 30).

Long-term benchmark sovereign yields in advanced foreign economies (AFEs) have also moved down since late last year, with particularly marked reductions in the euro area (figure 31). Market participants have pointed to several potential explanations for the declines in U.S. and foreign yields. One possible explanation is that market participants have lowered their expectations for future short-term interest rates around the globe. This downward adjustment in expectations may be due to a combination of a lower assessment of the global economy's long-run potential growth rate and a decrease in long-run inflation expectations. Indeed, the lower yields in the euro area are consistent

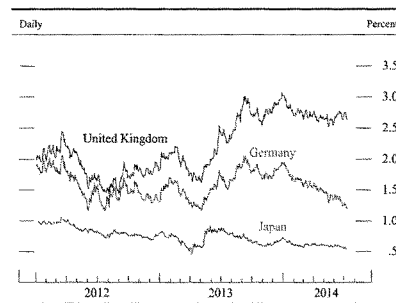
with indications of declining inflation and weak growth in the euro area in recent months, bolstering expectations that the European Central Bank (ECB) would loosen its monetary policy, as it eventually did at its meeting in early June.

In addition, term premiums—the extra return investors expect to obtain from holding longer-term securities as opposed to holding and rolling over a sequence of short-term securities for the same period—may have come down, reflecting several potential factors. One potential factor is a reduction in the amount of compensation for interest rate risk that investors require to hold fixed-income securities, likely due in part to perceptions that uncertainty about the outlook for monetary policy and economic growth has decreased; indeed, swaption-implied volatility on longer-term rates has fallen noticeably since the beginning of the year. Another potential factor is increased demand for Treasury securities from price-insensitive investors, such as pension funds and commercial banks. Lastly, in light of the notable co-movements between forward interest rates at longer horizons in the United States and other advanced economies, it appears likely that there is a global component of term premiums that is affected not only by U.S. developments, but also by foreign developments, such as investors becoming increasingly confident that policy rates at the major foreign central banks will remain low for an extended period.

Broad equity price indexes increased further, and risk spreads on corporate debt declined

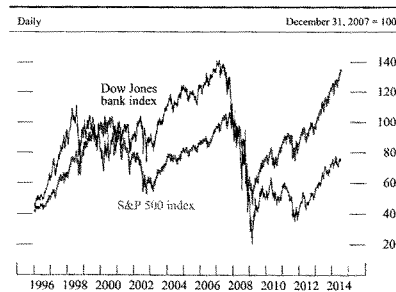
Although equity investors appeared to pull back from the market for a time early in the year in reaction to concerns about the strength of some EMEs and the possible implications for global growth, broad measures of U.S. equity prices have posted solid gains of 6 percent since the beginning of 2014, on balance, after having risen 30 percent in 2013 (figure 32). Overall, equity investors appeared

31. 10-year nominal benchmark yields in advanced foreign economies



SOURCE: Bloomberg.

32. Equity prices



SOURCE: Dow Jones bank index; Standard & Poor's 500 index via Bloomberg.

to become more confident in the near-term economic outlook amid somewhat better-than-expected economic data releases, declining longer-term interest rates, and upward revisions to expected year-ahead earnings per share for firms in the S&P 500 index.

Some broad equity price indexes have increased to all-time highs in nominal terms since the end of 2013. However, valuation measures for the overall market in early July were generally at levels not far above their historical averages, suggesting that, in aggregate, investors are not excessively optimistic regarding equities. Nevertheless, valuation metrics in some sectors do appear substantially stretched—particularly those for smaller firms in the social media and biotechnology industries, despite a notable downturn in equity prices for such firms early in the year. Moreover, implied volatility for the overall S&P 500 index, as calculated from option prices, has declined in recent months to low levels last recorded in the mid-1990s and mid-2000s, reflecting improved market sentiment and, perhaps, the influence of “reach for yield” behavior by some investors.

Credit spreads in the corporate sector have also declined, on balance, in recent months. After having temporarily increased early in the year, the spreads of yields on corporate bonds to yields on Treasury securities of comparable maturities ended the first half of the year about unchanged or a bit narrower. Credit spreads on high-yield corporate bonds are near the bottom of their range over the past decade. While spreads on syndicated loans have changed little this year, they are also relatively low. For further discussion of asset prices and other financial stability issues, see the box “Developments Related to Financial Stability.”

Treasury market functioning and liquidity conditions in the MBS market were generally stable . . .

Indicators of Treasury market functioning remained stable amid ongoing reductions in the pace of the Federal Reserve’s asset

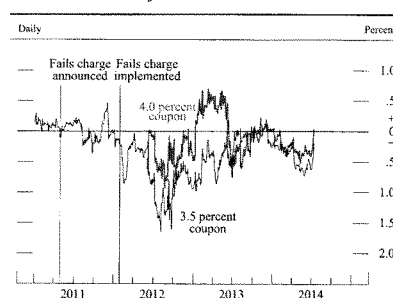
purchases over the first half of 2014. In particular, liquidity conditions in Treasury markets remained stable, with bid-asked spreads in the Treasury market staying in line with recent averages. In addition, the Treasury's first-ever auction of a Floating Rate Note in January was well received, as were subsequent auctions of those notes.

Liquidity conditions in the MBS markets were also generally stable, though there have been some signs of scarcity of certain securities, as evidenced by somewhat low levels of implied financing rates in the production-coupon "dollar roll" markets during the first half of this year. However, the implied financing rates rose in recent days, suggesting easing of settlement pressures in these markets of late (figure 33).⁸ Gross issuance of these securities remained somewhat lower than in the past two years, reflecting relatively low mortgage originations.

. . . and short-term funding markets also continued to function well

Conditions in short-term dollar funding markets also remained stable during the first half of 2014. Early in the year, yields on Treasury bills maturing between late February and mid-March of 2014—those that could have been affected by delayed payments if a debt ceiling agreement had not been reached—were elevated for a time, but those yields declined in mid-February in response to news of pending legislation to suspend the debt ceiling until March 2015. The federal funds rate remained at very low levels, and broader measures of unsecured dollar bank funding costs, such as the LIBOR, or London

33. Dollar-roll-implied financing rates (front month), Fannie Mae 30-year



NOTE: The 4.0 percent coupon data series begins on June 1, 2012.
SOURCE: J.P. Morgan.

8. Dollar roll transactions consist of a purchase or sale of agency MBS with the simultaneous agreement to sell or purchase substantially similar securities on a specified future date. The Federal Reserve engages in these transactions as necessary to facilitate settlement of its agency MBS purchases.

During April and May, the Open Market Desk transitioned purchases of agency MBS to FedTrade, the Desk's proprietary trading system that uses multiple-price competitive auctions.

Developments Related to Financial Stability

Pressures within the U.S. financial system that could leave it vulnerable to adverse events do not appear to have increased appreciably this year. In the current economic environment, the Committee views low interest rates as necessary to support progress toward price stability and maximum sustainable employment. Policymakers have noted the possibility that a prolonged period of low interest rates may provide incentives for some investors to “reach for yield,” and those actions could increase vulnerabilities in the financial system. Asset prices for real estate, equities, and corporate bonds have risen and valuation measures have increased, but valuations have remained generally in line with historical norms. Moreover, despite brisk borrowing by the business sector, aggregate private nonfinancial debt has increased at only a moderate pace, and the financial strength of the banking sector has continued to improve. Substantial progress has been made to reduce structural vulnerabilities in the financial system, although this work is ongoing.

With regard to asset valuations, house prices have continued to increase, but, for the most part, these increases have left aggregate price-to-rent ratios within historical norms. Moreover, growth in residential mortgage debt has remained anemic, suggesting that the recent increases are not fueled by excessively aggressive lending conditions. More broadly, aggregate measures of the household debt burden appear reasonable despite recent rapid growth in auto lending and student loans, which has strained some borrowers, particularly those in the lower half of the income distribution.

However, signs of risk-taking have increased in some asset classes. Equity valuations of smaller firms as well as social media and biotechnology firms appear to be stretched, with ratios of prices to forward earnings remaining high relative to historical norms. Beyond equities, risk spreads for corporate bonds have narrowed and yields have reached all-time lows. Issuance of speculative-grade corporate bonds and leveraged loans has been very robust, and underwriting standards have loosened. For example, average debt-to-earnings multiples have risen, and the share rated B or below has moved up further for leveraged loans. The Federal Reserve continues to closely monitor developments in the leveraged lending market and, in

conjunction with other federal agencies, is working to enhance compliance with previous guidance on issuance, pricing, and underwriting standards.¹

The financial strength of the banking sector has continued to improve. Bank holding companies (BHCs) have pushed up their regulatory capital ratios, continuing a trend seen since the first set of government stress tests in 2009. The sector's aggregate Tier 1 common equity ratio, which compares high-quality capital to risk-weighted assets for all BHCs, has more than doubled, from 5.5 percent in the fourth quarter of 2008 to 11.7 percent in the first quarter of 2014. In addition, all of the domestic systemically important banking organizations met their minimum Tier 1 common equity ratios, including the capital surcharge, required under Basel III rules. Moreover, BHCs have continued to strengthen their liquidity positions in recent quarters and have become less reliant on wholesale short-term funding.

Strong capital and liquidity positions help ensure that banking organizations have the ability to lend to households and businesses and to continue to meet their financial obligations, even in times of economic difficulty. Results of the most recent set of stress tests were released in March 2014. Thirty BHCs participated in the stress tests. These institutions have a combined \$13.5 trillion in assets, or approximately 80 percent of all U.S. BHC assets. The Dodd-Frank Act stress test (DFAST), mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, and the Comprehensive Capital Analysis and Review (CCAR) continue to enhance supervisors' understanding of the underlying processes used by each BHC to assess the adequacy of the size and composition

1. In March 2013, the Federal Deposit Insurance Corporation, the Federal Reserve, and the Office of the Comptroller of the Currency issued joint supervisory guidance on leveraged lending practices, which became effective in May 2013. Since that time, there has been strong supervisory follow-up to ensure compliance, in the form of supervisory reviews throughout 2014 and the issuance of supervisory letters, including specific Matters Requiring Attention. See Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation (2013), “Interagency Guidance on Leveraged Lending,” Supervision and Regulation Letter SR 13-3 (March 21), www.federalreserve.gov/bankinfo/reg/srletters/sr1303.htm.

of its capital relative to the risks it faces. Under the “severely adverse” DFAST scenario, all but one of the participating BHCs exceeded minimum capital requirements. Furthermore, under CCAR, the Federal Reserve Board granted nonobjections to the capital plans of 24 BHCs.²

Recent results from the Senior Credit Officer Opinion Survey on Dealer Financing Terms indicate that the use of financial leverage by respondents’ counterparties to purchase securities has not changed notably in recent quarters, although demand for financing commercial mortgage-backed securities and collateralized loan obligations (CLOs) has been rising recently. However, aggregate measures of the use of short-term wholesale funding to finance assets remained roughly unchanged over the past couple of years. Similarly, securitization, which continues to be an important means of financing, has been modest, though issuance of CLOs has increased.

Moving beyond recent developments, important structural vulnerabilities remain that could leave the U.S. financial system exposed to adverse events. Despite the increase in resilience within the banking sector highlighted by the stress tests, the broader financial system remains highly interconnected. While stronger capital and liquidity positions in the banking sector should help reduce the consequences of this structural vulnerability, the Federal Reserve nevertheless continues to encourage firms to better manage their exposures to large counterparties and to improve their recovery and resolution plans. The Federal Reserve is also working to strengthen the infrastructure of derivatives markets—for instance, by working with other agencies on rules to establish initial and variation margin requirements for over-the-counter derivatives transactions. The potential for runs on money market mutual funds in the event of a severe liquidity or credit shock remains significant, and this risk will continue to pose a threat to financial stability until further structural reforms are adopted, as recommended by the Financial Stability Oversight Council.

The Federal Reserve has taken a number of steps to

2. Initially, the Federal Reserve Board granted nonobjections to the capital plans of 25 firms, but the nonobjection granted to the 25th firm was withdrawn after that firm restated its capital position.

continue improving the resiliency of the financial system. Some regulatory reforms taken since the previous *Monetary Policy Report* are highlighted here. Pursuant to section 165 of the Dodd-Frank Act, the Federal Reserve Board approved a final rule strengthening the supervision and regulation of large U.S. BHCs and foreign banking organizations. The rule establishes enhanced prudential standards with respect to capital, liquidity, and risk management. It also requires foreign banking organizations with a significant U.S. presence to establish an intermediate holding company over their U.S. subsidiaries, which will facilitate consistent supervision and regulation of the U.S. operations of these foreign banks.

Furthermore, together with other federal agencies, the Federal Reserve Board adopted a final rule to strengthen the leverage ratio standards for the largest, most interconnected U.S. banking organizations. The final rule applies to top-tier U.S. BHCs with more than \$700 billion in consolidated total assets or more than \$10 trillion in assets under custody and to their insured depository institution subsidiaries. These BHCs must maintain a leverage buffer greater than 2 percentage points above the minimum supplementary leverage ratio requirement of 3 percent, for a total of more than 5 percent, to avoid restrictions on capital distributions and discretionary employee bonus payments. Insured depository institution subsidiaries of these BHCs must maintain at least a 6 percent supplementary leverage ratio to be considered “well capitalized” under the agencies’ prompt corrective action framework. The final rule has an effective date of January 1, 2018. The Federal Reserve Board is also working on proposals for additional risk-based capital surcharges and long-term debt requirements for global, systemically important banking organizations based in the United States.

The Federal Reserve Board also issued a notice of proposed rulemaking to implement section 622 of the Dodd-Frank Act. Section 622 establishes a financial-sector concentration limit that prohibits a financial company from merging with, acquiring, or consolidating with another company if the ratio of the resulting financial company’s liabilities to the aggregate consolidated liabilities of all financial companies exceeds 10 percent. The proposed rule spells out the details involved in calculating the limit.

interbank offered rate, remain at very low levels, reflecting the absence of major funding pressures.

Money market participants continued to focus on the Federal Reserve's testing of its monetary policy tools. Daily awards at the overnight reverse repurchase agreement (ON RRP) exercise have ranged between about \$50 billion and about \$340 billion since early 2014. The number of counterparties participating and the dollar volume of take-up have been sensitive to the spread between market rates for repurchase agreements and the fixed ON RRP rate offered in the exercise.⁹ Indeed, take-up has been large at quarter-ends, when balance sheet adjustments by financial institutions tend to limit other investment options. Experience to date suggests that ON RRP operations have helped establish a floor on money market interest rates. Testing of the Term Deposit Facility, as well as take-up of and participation in its test offerings, has expanded during the first half of 2014. (For further discussion of the testing of monetary policy tools, see the box "Planning for Monetary Policy Implementation during Normalization" in Part 2.)

The condition of financial institutions improved further, although profitability remained below its historical average

Regulatory capital ratios at bank holding companies (BHCs) increased further during the first half of 2014, and measures of bank liquidity remained robust. In addition, credit quality at BHCs continued to improve across major loan categories, and the ratios of loss reserves to delinquencies and to charge-offs each edged up. At the same time, standard

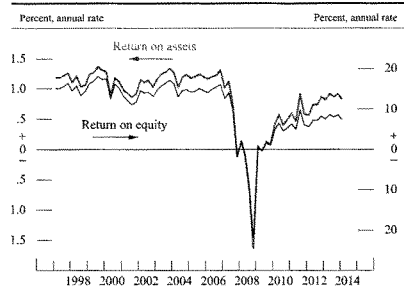
9. Fixed-rate ON RRP operations were first authorized by the FOMC at the September 2013 meeting, and were reauthorized in January 2014, for the purpose of assessing operational readiness. The Committee authorized the Open Market Desk to conduct such operations involving U.S. government securities and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States.

measures of the profitability of BHCs have been little changed for the past six months (figure 34). Profitability of these companies remained below its historical average, in part because of subdued income from mortgage and trading businesses and compressed net interest margins at large banks. A few large banks have also incurred sizable costs from legal settlements associated with the origination of mortgages prior to the recent financial crisis. Aggregate credit provided by commercial banks grew at a solid pace in the first half of 2014 (figure 35). The increase was driven by a pickup in loan growth and a rise in holdings of U.S. Treasury securities that was reportedly influenced by banks' efforts to meet new liquidity regulations. Equity prices of large domestic banks increased a bit from the beginning of the year, on net, but underperformed the overall market, as shown in figure 32. Credit default swap (CDS) spreads for large BHCs remain low.

Among nonbank financial institutions, equity prices of insurance companies have also increased slightly, on net, since the beginning of the year. Nonbank financial institutions continued to grow at a very strong pace, as assets under management at hedge funds and private equity groups each reached record highs, reflecting modest increases in asset values as well as net inflows. Nevertheless, in response to the Federal Reserve Board's Senior Credit Officer Opinion Survey on Dealer Financing Terms for March and June, most dealers indicated that hedge funds had not changed their use of leverage since the beginning of the year (figure 36).¹⁰ In the same survey, some dealers noted that the use of financial leverage by trading REITs, or real estate investment trusts, had decreased, continuing a trend that began in the summer of 2013. Assets under management at bond mutual funds also reached a record high.

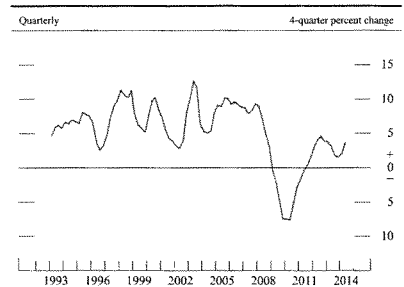
10. The Senior Credit Officer Opinion Survey on Dealer Financing Terms is available on the Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

34. Profitability of bank holding companies



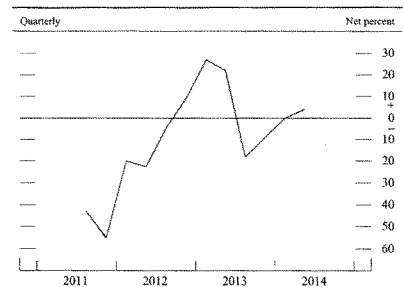
NOTE: The data, which are seasonally adjusted, are quarterly.
SOURCE: Federal Reserve Board, Reporting Form FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

35. Change in total bank credit



NOTE: The data are seasonally adjusted and extend through 2014:Q2.
SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

36. Change in use of financial leverage by hedge funds



NOTE: The data begin in 2011:Q3 and extend through 2014:Q2. Net percent equals the percent of dealers that reported an increase in the use of leverage (chose the response "increased considerably" or "increased somewhat") minus the percent of dealers that reported a decrease in the use of leverage (chose the response "decreased considerably" or "decreased somewhat").

SOURCE: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.

Municipal bond markets functioned smoothly, but some issuers remained strained

Credit conditions in municipal bond markets generally appeared to remain stable over the first half of the year. Yields on 20-year general obligation municipal bonds have declined slightly since the beginning of the year, and the MCDX, an index of CDS for a broad portfolio of municipal bonds, has also moved down. However, the ratio of an index of municipal bond yields to Treasury yields has increased a bit.

Nevertheless, significant financial strains have been evident for some issuers. Standard & Poor's, Moody's Investors Service, and Fitch Ratings downgraded Puerto Rico's general obligation bonds from investment grade to speculative grade in February. In addition, the City of Detroit continues to negotiate the terms of its bankruptcy plan.

Liquid deposits in the banking sector continued to advance briskly, boosting M2

M2 has increased at an annual rate of about 7 percent since December, about the same pace registered in the second half of 2013 and somewhat faster than the pace of nominal GDP. The growth in M2 has been driven by an increase in liquid deposits as well as an uptick in demand for currency.

International Developments

As in the United States, foreign bond yields declined and asset prices increased, on net . . .

As noted earlier, foreign long-term benchmark sovereign yields have moved significantly lower since the beginning of the year. Factors contributing to the decline include expectations for lower policy interest rates, a decline in the required compensation for risk, and increased demand by price-insensitive investors for these assets. Similarly, foreign corporate and sovereign yield spreads have also declined since the start of the year. In particular, peripheral euro-area sovereign yield

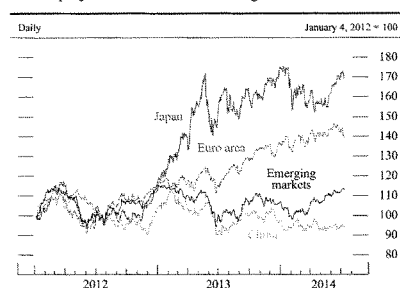
spreads narrowed substantially, on balance, as financial stresses in the euro area have eased and central banks in the advanced economies have emphasized that they will keep monetary policy accommodative for some time, though spreads in a few economies have moved up more recently. Sovereign yield spreads in EMEs have also declined, on net, consistent with measures adopted by EME central banks to reduce vulnerabilities and with the general increase in the prices for risky assets.

Foreign equity indexes rose, on net, during the first half of the year (figure 37). Stock prices increased, on balance, in most of the AFEs. Japanese equities underperformed early in the year, but they have moved up recently on stronger-than-expected incoming economic data. And European bank stock prices declined lately in part on concerns over troubles at several banks. Equities in most EMEs have also moved higher, as market sentiment toward these economies has continued to improve. However, the Chinese stock market fell on concerns over the economic outlook. Realized volatility across most financial markets and countries has declined since January, in part as sentiment toward risky assets generally improved.

... and the dollar is about unchanged

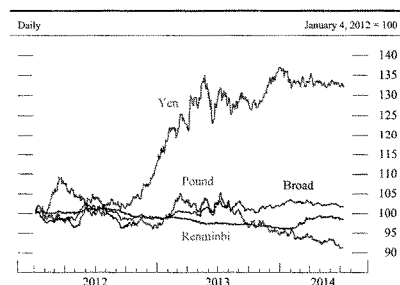
The broad nominal value of the dollar is little changed, on net, since the beginning of the year (figure 38). The U.S. dollar appreciated notably against the Chinese renminbi in the first months of the year. However, the People's Bank of China has since kept the value of the renminbi steady. In contrast, the dollar depreciated against most other emerging market currencies, as financial stresses earlier in the year unwound. In addition, the dollar depreciated against the British pound, as macroeconomic conditions improved in the United Kingdom and markets moved forward their expectations for the first rate hike by the Bank of England, and also depreciated against the Japanese yen, as investors reduced their expectations for stronger policy accommodation in Japan.

37. Equity indexes for selected foreign economies



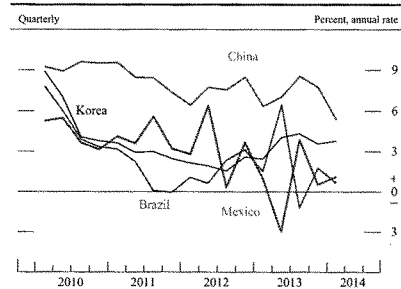
SOURCE: For emerging markets, Morgan Stanley Emerging Markets MEXF Capital Index; for the euro area, Dow Jones Euro STOXX Index; for Japan, Tokyo Stock Price Index (TOPIX); for China, Shanghai Composite Index; all via Bloomberg.

38. U.S. dollar exchange rate against broad index and selected major currencies



NOTE: The data are in foreign currency units per dollar.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

39. Real gross domestic product growth in selected emerging market economies



SOURCE: For China, CEIC Data; for Korea, Bank of Korea via ECOS Economic Statistics System; for Brazil, Brazilian Institute of Geography and Statistics; for Mexico, Haver Analytics.

Activity in the emerging market economies slowed in the first quarter but showed signs of picking up in the second quarter . . .

Aggregate real GDP growth in the EMEs slowed in the first quarter of this year, led by a step-down in China's economy that also weighed on activity in many of its trading partners, especially in emerging Asia (figure 39). The slowing in China reflected a sharp fall in exports, as well as a restraint on domestic demand from tighter financial conditions, as the government attempted to rein in credit. In Mexico, growth remained weak in the first quarter, likely restrained by hikes in tax rates and administered fuel prices and softer U.S. demand for Mexican exports. Brazilian real GDP rose at a tepid pace in the first quarter, extending the lackluster performance of the past two years.

Recent indicators, notably exports, suggest that EME growth picked up in the second quarter. In particular, Chinese exports grew robustly in the second quarter, reversing most of the sharp decline in February, and the authorities announced a series of small targeted stimulus measures to support growth. The improvement in Chinese growth, along with firmer growth in the advanced economies, will help boost global economic activity in the rest of emerging Asia. Growth in Mexico is also expected to step up in the second quarter, in line with U.S. manufacturing output, and recent data in Brazil point to some, albeit modest, improvement.

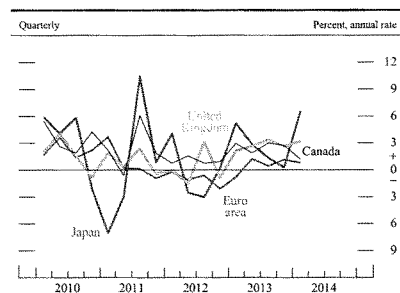
Inflation remained subdued in most EMEs, and central banks in some countries, such as Chile, Mexico, and Thailand, cut rates to support growth. In contrast, the central banks of a few EMEs, such as Brazil and India, where inflation remained elevated, raised policy rates.

... while economic growth in most advanced foreign economies remained moderate

Indicators suggest that average economic growth in the AFEs remained moderate in the first half of 2014 (figure 40). The severe winter weather that hampered growth in the United States also weighed on real GDP in Canada, where growth slowed to an annualized 1¼ percent pace in the first quarter. However, data including the purchasing managers index are consistent with Canadian growth bouncing back in the second quarter. In Japan, GDP growth surged in the first quarter at a nearly 7 percent pace, led by household spending ahead of the April hike in the Japanese consumption tax, but recent retail sales data suggest that activity fell back sharply in April. In the United Kingdom, GDP growth remained robust in the first quarter at 3¼ percent, and the unemployment rate fell about 1 percentage point between mid-2013 and the first quarter of 2014. The euro area's recovery continued at a subdued pace—with GDP rising at an annual rate of around ¾ percent in the first quarter—and recent indicators point to a firming in growth in the second quarter as financial and credit conditions continue to normalize.

Inflation during the first half of the year has been around 2 percent in Canada and somewhat below that level in the United Kingdom. In Japan, the April tax hike as well as rising import prices in response to recent yen depreciation pushed up the 12-month rate of consumer price inflation in April. However, inflation excluding taxes remained much lower, and the Bank of Japan continued its aggressive program of asset purchases aimed at achieving its inflation target of 2 percent in a stable manner. In the euro area, inflation slowed to just ½ percent in May, and the ECB responded in June by cutting its key policy rates—taking the deposit rate into negative territory—and by announcing measures to ease credit conditions. (For further discussion of monetary policy at foreign central banks, see the box “Prospects for Monetary Policy Normalization in the Advanced Economies.”)

40. Real gross domestic product growth in selected advanced foreign economies



SOURCE: For Canada, Statistics Canada; for the euro area, Eurostat; for Japan, Cabinet Office of Japan; for the United Kingdom, Office for National Statistics.

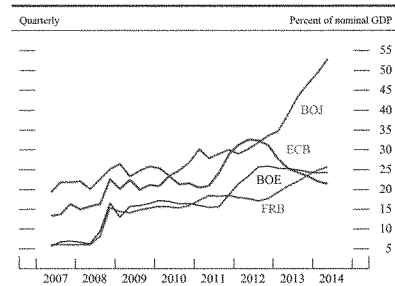
Prospects for Monetary Policy Normalization in the Advanced Economies

Five years after the global financial crisis, policy rates in the advanced economies remain at or near record lows, and the asset holdings of several central banks remain elevated (figure A). Even as recently as mid-2013, market expectations, as implied by quotes for overnight index swaps, suggested that policy normalization in the advanced economies would occur more or less in tandem (figure B).

Since that time, however, market views on the prospective policies of the major central banks seem to have diverged. Over the past 15 months, markets have progressively revised upward, on net, the policy rate expected at the end of 2015 in the United Kingdom. These expectations, along with those for the United States, have decoupled from those for the euro area and Japan. Market expectations of policy rates in the euro area have decreased steadily over the past year, while in Japan policy rates are expected to remain low.

In part, this divergence is due to the differences in inflation and growth outlooks across these economies. The recovery has gained footing in the United Kingdom and remains on track in the United States, with the unemployment rate continuing to fall in both countries. In contrast, euro-area inflation has declined markedly, and medium-term expectations for inflation, measured both from surveys and from inflation swaps, have also edged down. Gross domestic product in the euro area has grown more slowly than in other economies. In

A. Central bank assets in selected advanced economies



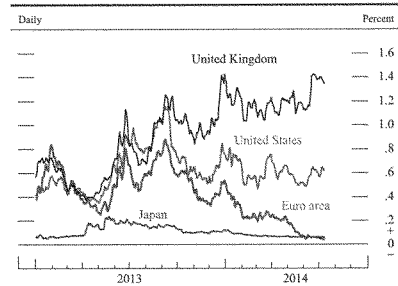
NOTE: The data extend through 2014:Q2. The 2014:Q2 central bank assets are divided by 2014:Q1 gross domestic product (GDP).

SOURCE: For the euro area, European Central Bank (ECB) and Eurostat; for Japan, Bank of Japan (BOJ) and Cabinet Office of Japan; for the United Kingdom, Bank of England (BOE) and Office for National Statistics; for the United States, Federal Reserve Board (FRB) and Bureau of Economic Analysis.

Japan, survey-based expectations for inflation over the next 10 years have risen more than 1 percentage point since early 2013 but are still below the 2 percent target.

Indeed, recent monetary policy actions across major central banks appear to have diverged. Some

B. December 2015 expected policy rates



NOTE: The data are three-day moving averages of one-month forward rates from overnight index swap quotes.
SOURCE: Overnight index swap quotes are from Bloomberg.

central banks are beginning to take steps to prepare for normalization, though monetary policy remains accommodative. The Bank of England (BOE) stopped asset purchases in 2012, though it has maintained its asset holdings by reinvesting the proceeds of maturing assets. In addition, the BOE issued forward guidance laying out the conditions under which it will begin to

raise its policy rate, and the unemployment rate has already fallen below its initially announced threshold. The Federal Reserve has reduced the pace of its asset purchases in recent months and continues to provide forward guidance regarding the eventual liftoff of the federal funds rate and its subsequent path.

In contrast, the Bank of Japan (BOJ) and the European Central Bank (ECB) continue to ease policy. The BOJ announced a substantial expansion of its asset purchases in April 2013 with its Quantitative and Qualitative Monetary Easing program and committed to continuing purchases "as long as necessary" to achieve its 2 percent inflation target, though its stated aim is to achieve that goal by April 2015. As part of the program, the BOJ is doubling the monetary base and its holdings of Japanese government bonds and exchange-traded funds. Likewise, the ECB announced a new round of stimulus measures in its June 2014 policy meeting. The ECB cut its policy rates, lowering its main lending rate to 15 basis points and its deposit rate to negative 10 basis points. The ECB also increased the provision of short-term liquidity and announced targeted longer-term refinancing operations, or TLTROs, at fixed interest rates through 2018, thus reinforcing its forward guidance that it will keep rates low for an extended period. Moreover, the ECB announced it will intensify preparatory work related to purchases of asset-backed securities.

PART 2

MONETARY POLICY

To support further progress toward maximum employment and price stability, monetary policy has remained highly accommodative. The Federal Reserve kept the target federal funds rate at its effective lower bound, updated its forward guidance regarding the path of the federal funds rate, and added to its sizable holdings of longer-term securities, albeit at a reduced pace. The Federal Reserve has also continued to plan for the eventual normalization of monetary policy.

The Federal Open Market Committee continued to use large-scale asset purchases and forward rate guidance to support further progress toward maximum employment and price stability

The Committee has continued to judge that a highly accommodative stance of monetary policy remains warranted to support progress toward its dual mandate of maximum employment and price stability. With the target range for the federal funds rate remaining at its effective lower bound, the Federal Open Market Committee (FOMC) has made further use of nontraditional policy tools to provide appropriate monetary stimulus (figure 41). In particular, the FOMC has used large-scale asset purchases to put downward pressure on longer-term interest rates and to ease financial conditions more broadly so as to promote the more rapid achievement of its dual objectives. In addition, the FOMC has provided guidance about the likely future path of the federal funds

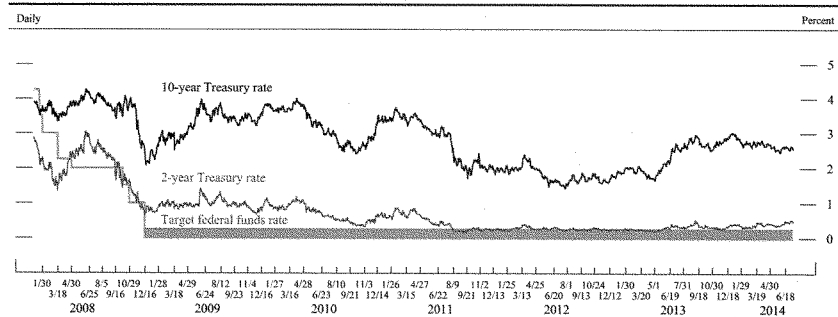
rate in an effort to give greater clarity to the public about its policy outlook and intentions. In light of the cumulative progress toward its monetary policy objectives and the outlook for further progress over coming years, the Committee made adjustments during the first half of 2014 to both its asset purchase program and its forward guidance about the path of the federal funds rate.

The FOMC made further measured reductions in the pace of its asset purchases . . .

During the first half of 2014, the Committee made further measured reductions in the pace of its asset purchases, following the initial modest reduction announced at the December 2013 meeting.¹¹ These actions

11. See Board of Governors of the Federal Reserve System (2013), "Federal Reserve Issues FOMC Statement," press release, December 18, www.federalreserve.gov/newsevents/press/monetary/20131218a.htm.

41. Selected interest rates



NOTE: The 2-year and 10-year Treasury rates are the constant-maturity yields based on the most actively traded securities. The dates on the horizontal axis are those of regularly scheduled Federal Open Market Committee meetings.
SOURCE: Department of the Treasury; Federal Reserve Board.

reflected the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program in the fall of 2012 as well as the Committee's judgment that there was sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective.

Specifically, at its four meetings in the first half of 2014, the Committee reduced the monthly pace of its purchases of agency mortgage-backed securities (MBS) and of longer-term Treasury securities by \$5 billion each. Accordingly, beginning in July, the Committee is adding to its holdings of agency MBS at a pace of \$15 billion per month (compared with \$35 billion per month at the beginning of the year) and is adding to its holdings of longer-term Treasury securities at a pace of \$20 billion per month (compared with \$40 billion per month at the beginning of the year). The FOMC also maintained its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS in agency MBS and of rolling over maturing Treasury securities at auction.

While making measured reductions in the pace of its purchases, the Committee noted that its sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative. More accommodative financial conditions, in turn, should promote a stronger economic recovery, a further improvement in labor market conditions, and a return of inflation, over time, toward the Committee's 2 percent objective.

At each of its meetings so far this year, the FOMC reiterated that it would closely monitor incoming information on economic and financial developments, and that it would continue asset purchases and employ its other policy tools as appropriate until the outlook for

the labor market had improved substantially in a context of price stability. The Committee also noted that if incoming information broadly supports its expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, it would likely reduce the pace of asset purchases in further measured steps at future meetings. However, the Committee also emphasized that asset purchases are not on a preset course, and that decisions about their pace would remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

. . . updated its forward guidance with a qualitative description of the factors that will influence its decision to begin raising the federal funds rate . . .

As 2014 began, the Committee's forward guidance included quantitative thresholds, stating that the exceptionally low target range for the federal funds rate of 0 to ¼ percent would be appropriate at least as long as the unemployment rate remained above 6½ percent, inflation between one and two years ahead was projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continued to be well anchored.¹² The Committee also indicated that in determining how long to maintain a highly accommodative stance of monetary policy, it would consider not only the unemployment rate but also other indicators, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Based on its assessment of these factors, the Committee noted that it likely would be appropriate to maintain the current target range for the federal funds rate well past the time the unemployment rate declines below 6½ percent, especially if

12. See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, January 29, www.federalreserve.gov/newsevents/press/monetary/20140129a.htm.

projected inflation continues to run below the Committee's 2 percent longer-run goal.

At the time of the March meeting, with the unemployment rate quickly approaching the threshold of 6½ percent, the FOMC decided to update its forward guidance by providing a qualitative description of the factors that would influence its decision regarding the appropriate time of the first increase in the target federal funds rate from its current 0 to ¼ percent target range.¹³ The Committee agreed that while reliance on a single indicator—the unemployment rate—had been useful for communications purposes when employment conditions were much further from mandate-consistent levels, with labor market conditions improving, the Committee would base its judgment concerning progress in the labor market on a much broader set of indicators from that point forward. Specifically, the Committee indicated that in determining how long to maintain the current target range, it would assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment would take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Based on its assessment of these factors, the Committee indicated that it likely would be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continued to run below the Committee's 2 percent longer-run goal and provided that longer-term inflation expectations remained well anchored. To help forestall misinterpretation of the new forward guidance, the Committee noted that the change in its guidance did not indicate any change in its policy intentions as set forth in its recent statements.

13. See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, March 19, www.federalreserve.gov/newsevents/press/monetary/20140319a.htm.

... and added information regarding the likely behavior of the target federal funds rate after the rate is raised above its effective lower bound

The Committee also stated that, when it decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent. In addition, the Committee indicated its anticipation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

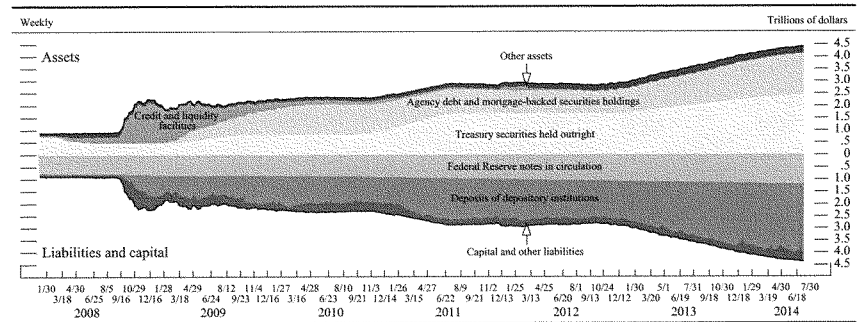
Committee participants have noted that a prolonged period of low interest rates could lead investors to take on excessive risk, potentially posing risks to longer-term financial stability. The Federal Reserve will continue to monitor the financial system for any signs of the buildup of such risks and will take appropriate steps to address such risks as needed (see the box "Developments Related to Financial Stability" in Part 1).

The Committee's large-scale asset purchases led to a further increase in the size of the Federal Reserve's balance sheet

As a result of the FOMC's ongoing large-scale asset purchase program, Federal Reserve assets have increased further since the end of last year (figure 42). Holdings of U.S. Treasury securities in the System Open Market Account (SOMA) increased \$200 billion to \$2.4 trillion, and holdings of agency debt and MBS increased \$160 billion, on net, to \$1.7 trillion.¹⁴ On the liability side of the balance sheet, the increase in the Federal Reserve's assets was largely matched

14. The changes in the par value of SOMA holdings, noted earlier, can differ from the amount of securities purchased over the same period, largely because of lags in the settlement of the purchases. Among other assets, the outstanding amount of dollars provided through the temporary U.S. dollar liquidity swap arrangements with foreign central banks edged lower since the end of last year and remains close to zero, reflecting the continued stability in offshore U.S. dollar funding markets.

42. Federal Reserve assets and liabilities



NOTE: The data extend through July 9, 2014. Credit and liquidity facilities consists of primary, secondary, and seasonal credit; term auction credit; central bank liquidity swaps; support for Maiden Lane, Bear Stearns, and AIG; and other credit facilities, including the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, and the Term Asset-Backed Securities Loan Facility. Other assets includes unamortized premiums and discounts on securities held outright. Other liabilities includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. The dates on the horizontal axis are those of regularly scheduled Federal Open Market Committee meetings.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

by increases in reserve balances, currency in circulation, deposits with Federal Reserve banks, and reverse repurchase agreements.

Given the Federal Reserve's large and growing balance sheet, interest income on the SOMA portfolio continued to support substantial remittances to the U.S. Treasury. Last year, remittances totaled \$80 billion, and remittances over the first quarter of this year remained very high. Cumulative remittances to the Treasury from 2008 through the first quarter of 2014 exceeded \$420 billion.¹⁵

The Federal Reserve continued to plan for the eventual normalization of monetary policy

At its April meeting, the FOMC discussed issues associated with the eventual normalization of the stance and conduct of monetary policy during a period when the

Federal Reserve's balance sheet will be very large.¹⁶ The Committee's discussion of this topic was undertaken as part of prudent planning and did not imply that normalization will begin soon. The Committee discussed various tools that could be used to raise short-term interest rates—and to control the level of short-term interest rates once they are above the effective lower bound—even while the balance sheet of the Federal Reserve remains very large. Those tools included the rate of interest paid on excess reserve balances, fixed-rate overnight reverse repurchase agreement (ON RRP) operations, term reverse repurchase agreements, and the Term Deposit Facility (TDF). Participants considered how various combinations of tools could have different implications for the degree of control over short-term interest rates, the Federal Reserve's balance sheet and remittances to the Treasury, the functioning of the federal funds market, and financial stability in both normal times and periods of stress.

15. See Board of Governors of the Federal Reserve System (2014), *Quarterly Report on Federal Reserve Balance Sheet Developments* (Washington: Board of Governors, May), www.federalreserve.gov/monetarypolicy/files/quarterly_balance_sheet_developments_report_201405.pdf.

16. See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, April 29–30, 2014," press release, May 21, www.federalreserve.gov/newsevents/press/monetary/20140521a.htm.

At the June FOMC meeting, participants continued their discussion of normalization issues and considered some possible strategies for implementing and communicating monetary policy during that process.¹⁷ Most participants agreed that adjustments in the rate of interest on excess reserves (IOER) should play a central role during the normalization process. It was generally agreed that an ON RRP facility with an interest rate set below the IOER rate could play a useful supporting role by helping to firm the floor under money market interest rates. A few participants commented that the Committee should also be prepared to use its other policy tools, including term deposits and term reverse repurchase agreements, if necessary. Most participants thought that the federal funds rate should continue to play a role in the Committee's operating framework and communications during normalization, with many of them indicating a preference for continuing to announce a target range. While generally agreeing that an ON RRP facility could play an important role in the policy normalization process, participants discussed several possible concerns about using such a facility, including the potential for substantial shifts in investments toward the facility and away from financial and nonfinancial firms

in times of financial stress, the potential expansion of the Federal Reserve's role in financial intermediation, and the extent to which monetary policy operations might be conducted with nontraditional counterparties. Participants discussed design features that could help address these concerns. Several participants emphasized that, although the ON RRP rate would be useful in controlling short-term interest rates during normalization, they did not anticipate that such a facility would be a permanent part of the Committee's longer-run operating framework. Overall, participants generally expressed a preference for a simple and clear approach to normalization, and it was observed that it would be useful for the Committee to develop its plans and communicate them to the public later this year, well before the first steps in normalizing policy become appropriate, and to maintain flexibility about the evolution of the normalization process as well as the Committee's longer-run operating framework.

The Federal Reserve has continued to test the operational readiness of its policy tools, conducting daily ON RRP operations and several tests of the TDF during the first half of 2014. To date, testing has progressed smoothly, and, in recent months, short-term market rates have generally traded above the ON RRP rate. (For more discussion of the Federal Reserve's preparations for the eventual normalization of monetary policy, see the box "Planning for Monetary Policy Implementation during Normalization.")

17. See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, June 17–18, 2014," press release, July 9, www.federalreserve.gov/newsevents/press/monetary/20140709a.htm.

Planning for Monetary Policy Implementation during Normalization

As noted in recent communications by the Federal Open Market Committee (FOMC), if the economy continues to evolve as anticipated, the Federal Reserve's asset purchase program will likely be concluded following the October meeting. At that time, the size of the Federal Reserve's balance sheet will stand at about \$4.5 trillion, and reserve balances in the banking system will be close to \$3 trillion, an extraordinarily elevated level relative to the average level of reserve balances prior to the onset of the financial crisis—about \$25 billion. As a result, when the FOMC eventually chooses to begin removing policy accommodation, it will do so with a level of reserves in the banking system far in excess of that during any prior period of policy tightening.

In the past, the Federal Reserve tightened policy by draining small amounts of reserve balances through open market operations. The resulting scarcity of reserves in the banking system effectively raised the value to banks of their holdings of reserve balances as a means of satisfying reserve requirements and meeting clearing needs. The higher value of reserve balances then led banks to bid up the rate in the federal funds market and other short-term funding markets as they bolstered their reserve positions.

This traditional, quantity-based mechanism for tightening policy will not be feasible during the normalization period given the very elevated level of reserves in the banking system. Nonetheless, the Federal Reserve is confident that it has the tools necessary to tighten policy at the appropriate time. The basic tools at the Federal Reserve's disposal during the period of policy normalization include adjustments to the interest on excess reserves (IOER) rate; overnight reverse repurchase agreement (ON RRP) operations; and term operations, including the offer of term deposits issued through the Term Deposit Facility (TDF) and term reverse repurchase agreements (term RRP).

Alternative Policy Tools

As discussed in the minutes of recent FOMC meetings, adjustments to the IOER rate will be a particularly important tool during the normalization period. Banks should be unwilling to lend to any private counterparty at a rate lower than the rate they can earn on balances maintained at the Federal Reserve. As a result, an increase in the IOER rate will put upward pressure on a range of short-term interest rates. In effect, raising the IOER rate allows the Federal Reserve to increase the value that banks place on reserve balances, which will have market effects similar to those associated with a reduction in the quantity of

reserves in the traditional, quantity-based mechanism for tightening the stance of monetary policy.

As a complement to the IOER rate, the Federal Reserve could also employ ON RRP operations to put additional upward pressure on short-term interest rates. In an ON RRP operation, eligible Federal Reserve counterparties, importantly including many nonbank financial institutions, may invest funds with the Federal Reserve overnight at a given rate. Consequently, these institutions should be unwilling to lend to private counterparties in money markets at a rate below that available to them on ON RRP transactions with the Federal Reserve. As a result, ON RRP operations should complement the IOER rate in helping to establish a floor on money market interest rates. Finally, the Federal Reserve could also employ term operations—term deposits issued through the TDF and term RRP—to help drain reserves in the banking system and put further upward pressure on short-term interest rates.

As noted in the minutes of the April and June FOMC meetings, policymakers have considered a number of possible ways that these tools could be employed in combination during the normalization period.¹ These discussions have considered a range of issues, such as the extent of control over short-term interest rates, potential effects on trading in the federal funds market, financial stability considerations, costs to the Federal Reserve, and potential changes in patterns of financial intermediation. The Committee expects to provide the public with more information about its normalization plans later this year.

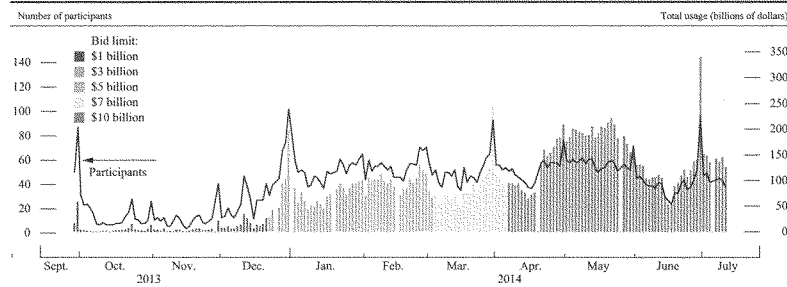
Ongoing Testing of the Alternative Policy Tools

At the same time, as part of prudent planning, the Federal Reserve has continued to test the operational readiness of its policy tools. The testing of these normalization tools has been ongoing for some time and has evolved in terms of the offering formats, tenors and rates offered, maximum awards or allotment amounts, and eligible counterparties.²

1. See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, April 29–30, 2014," press release, May 21, www.federalreserve.gov/newsevents/press/monetary/20140521a.htm; and Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, June 17–18, 2014," press release, July 9, www.federalreserve.gov/newsevents/press/monetary/20140709a.htm.

2. The types of counterparties that are currently eligible to participate in the Federal Reserve's ON RRP operations include depository institutions, money market funds, government-sponsored enterprises, and primary dealers, while

A. Overnight reverse repurchase agreement operations



NOTE: The data are daily and begin on September 23, 2013.
SOURCE: Federal Reserve Bank of New York, temporary open market operations data.

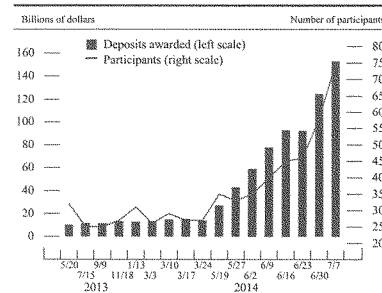
Since September 2013, the Open Market Desk has been conducting daily fixed-rate, capped-allotment ON RRP operations as authorized by the FOMC. In general, daily take-up of ON RRP has ranged between about \$50 billion and about \$340 billion since early this year, with the variation in usage primarily reflecting three factors: (1) changes in the daily counterparty allotment limit; (2) changes in the spread between market repurchase agreement rates and the rate offered in the Federal Reserve's ON RRP operations; and (3) calendar effects, including those related to month- and quarter-ends (figure A). Since the introduction of the exercise, the daily counterparty allotment limit has been gradually raised from \$0.5 billion to \$10 billion, the fixed rate offered on ON RRP operations has been changed within the authorized limits and currently stands at 5 basis points, and the collateral accepted in the operations has been limited to U.S. Treasury securities. Money market funds have accounted for most of the daily participants and most of the daily volume of take-up. All operations to date have proceeded smoothly. The availability of the ON RRP operations reportedly has helped establish a floor on overnight interest rates.³

only depository institutions may participate in TDF operations. Results of ON RRP operations can be found on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/omo/dmm/temp.cfm, and results of the TDF operations can be found on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/tdf.htm.

3. Between December 2009 and April 2013, the Open Market Desk also conducted a series of small-scale term RRP test operations. Those testing operations used a multi-price auction format and a term of two to six days; accepted collateral included U.S. Treasury securities, direct agency debt, and agency mortgage-backed securities. The number of eligible counterparties was extended over this period. The amount awarded in these test operations peaked at about \$3.3 billion.

The Federal Reserve's testing of the TDF has been ongoing since June 2010 and evolved in the first half of this year. The incremental changes to the terms and format of the facility this year were aimed at improving the participation of depository institutions as well as operational readiness.⁴ Most recently, the Federal Reserve conducted a series of eight TDF test operations, during which the maximum award amount per institution and the interest rate paid at the facility were raised gradually. As a result, the level of activity in these operations increased considerably relative to such levels in test operations conducted over recent years (figure B).

B. Term Deposit Facility operations



SOURCE: Federal Reserve Board.

4. Authority to operate the TDF comes from section 19(b)(12) of the Federal Reserve Act, which allows eligible institutions to receive earnings on balances maintained at Federal Reserve Banks and authorizes the Board of Governors to prescribe regulations concerning the payment of such earnings. Within this authority, the Board created the TDF and has adjusted the parameters of the facility from time to time.

PART 3

SUMMARY OF ECONOMIC PROJECTIONS

The following material appeared as an addendum to the minutes of the June 17–18, 2014, meeting of the Federal Open Market Committee.

In conjunction with the June 17–18, 2014, Federal Open Market Committee (FOMC) meeting, meeting participants submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2014 through 2016 and over the longer run.¹⁸ Each participant's assessment was based on information available at the time of the meeting plus his or her judgment of appropriate monetary policy and assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant's judgment of the value to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. "Appropriate monetary policy" is defined as the future

path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her individual interpretation of the Federal Reserve's objectives of maximum employment and stable prices.

Overall, FOMC participants expected that, under appropriate monetary policy, economic growth would pick up notably in the second half of 2014 and remain in 2015 and 2016 above their estimates of the longer-run normal rate of economic growth. Consistent with that outlook, the unemployment rate was projected to continue to decline toward its longer-run normal level over the projection period (table 1 and figure 1). The majority of participants projected that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would rise to a level at or slightly below the Committee's 2 percent objective in 2016.

The majority of participants expected that highly accommodative monetary policy would

18. Four members of the Board of Governors and the presidents of the 12 Federal Reserve Banks submitted projections. Governor Brainard took office on June 16, 2014, and participated in the June 17–18, 2014, FOMC meeting; she was not able to submit economic projections.

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, June 2014
Percent

Variable	Central tendency ¹				Range ²			
	2014	2015	2016	Longer run	2014	2015	2016	Longer run
Change in real GDP.....	2.1 to 2.3	3.0 to 3.2	2.5 to 3.0	2.1 to 2.3	1.9 to 2.4	2.2 to 3.6	2.2 to 3.2	1.8 to 2.5
March projection	2.8 to 3.0	3.0 to 3.2	2.5 to 3.0	2.2 to 2.3	2.1 to 3.0	2.2 to 3.5	2.2 to 3.4	1.8 to 2.4
Unemployment rate	6.0 to 6.1	5.4 to 5.7	5.1 to 5.5	5.2 to 5.5	5.8 to 6.2	5.2 to 5.9	5.0 to 5.6	5.0 to 6.0
March projection	6.1 to 6.3	5.6 to 5.9	5.2 to 5.6	5.2 to 5.6	6.0 to 6.5	5.4 to 5.9	5.1 to 5.8	5.2 to 6.0
PCE inflation	1.5 to 1.7	1.5 to 2.0	1.6 to 2.0	2.0	1.4 to 2.0	1.4 to 2.4	1.5 to 2.0	2.0
March projection	1.5 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	2.0
Core PCE inflation ³	1.5 to 1.6	1.6 to 2.0	1.7 to 2.0		1.4 to 1.8	1.5 to 2.4	1.6 to 2.0	
March projection	1.4 to 1.6	1.7 to 2.0	1.8 to 2.0		1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	

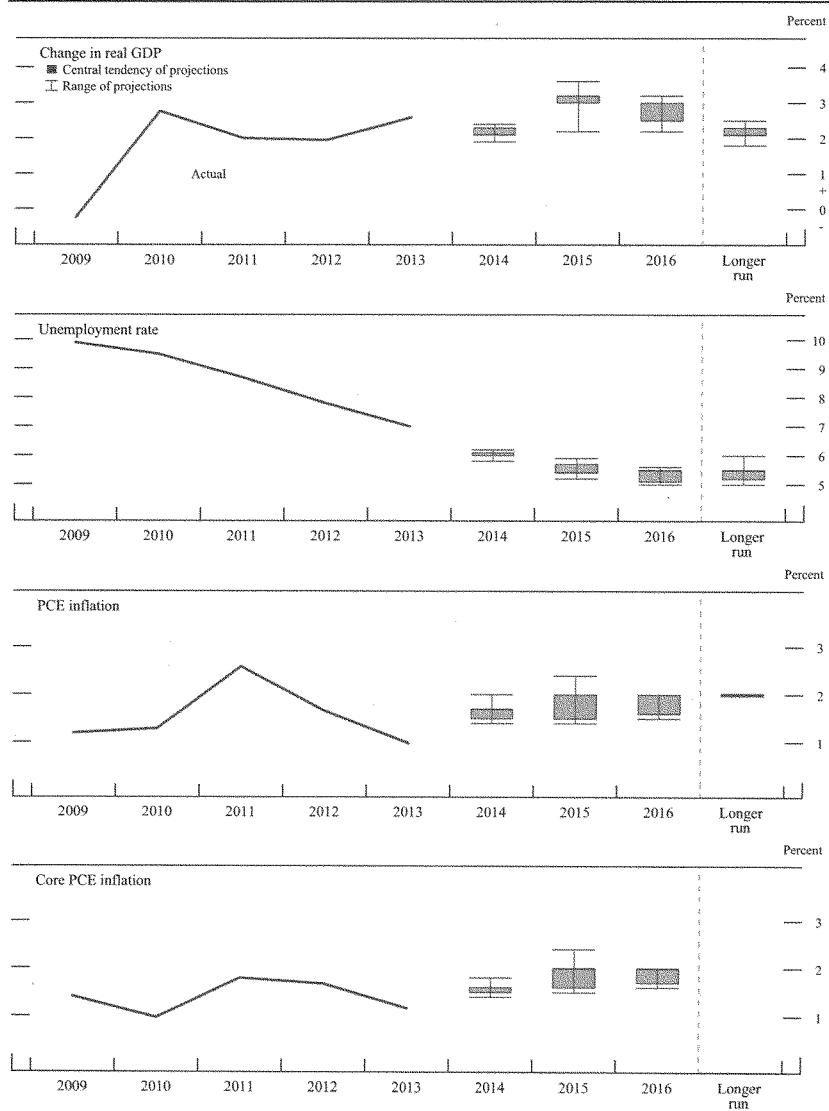
NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The March projections were made in conjunction with the meeting of the Federal Open Market Committee on March 18–19, 2014.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

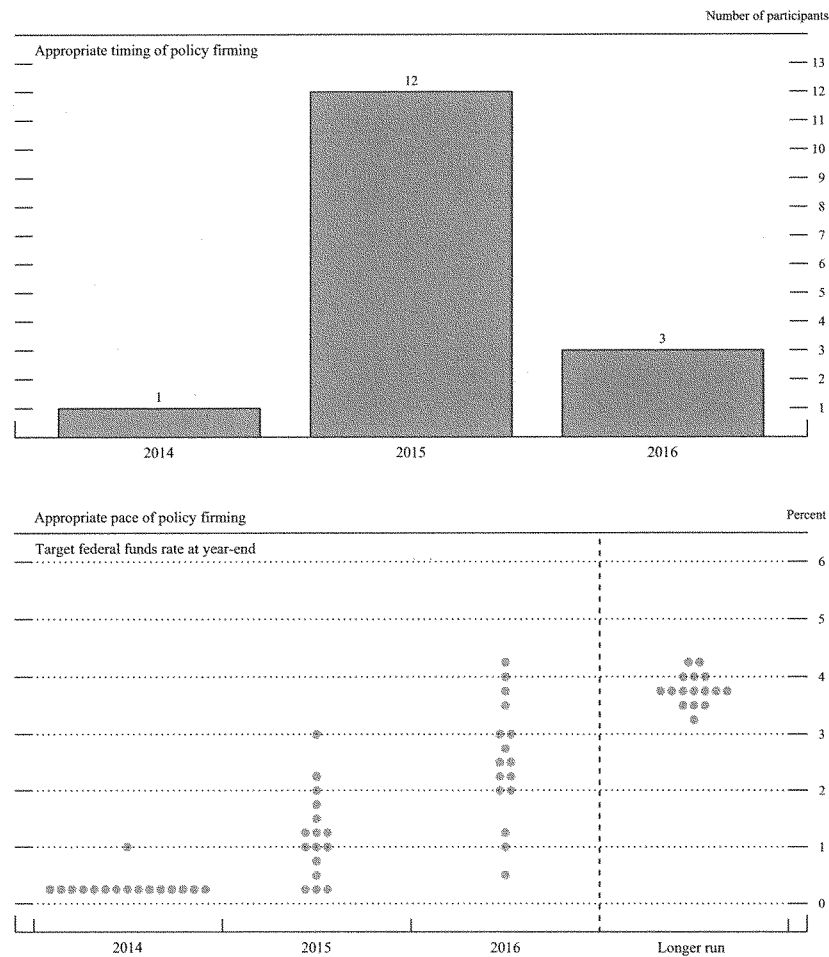
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2014–16 and over the longer run



NOTE: Definitions of variables are in the general note to table 1. The data for the actual values of the variables are annual.

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In March 2014, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 1, 13, and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percentage point) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

remain appropriate over the next few years to foster progress toward the Federal Reserve's longer-run objectives. As shown in figure 2, all but one of the participants anticipated that it would be appropriate to wait at least until 2015 before beginning to increase the federal funds rate, and most projected that it would then be appropriate to raise the target federal funds rate fairly gradually. Given their economic outlooks, most participants judged that it would be appropriate to continue gradually slowing the pace of the Committee's purchases of longer-term securities and complete the asset purchase program later this year.

Most participants saw the uncertainty associated with their outlooks for economic growth, the unemployment rate, and inflation as similar to that of the past 20 years. In addition, most participants considered the risks to the outlook for real GDP growth and the unemployment rate to be broadly balanced, and a majority saw the risks to inflation as broadly balanced. However, some saw the risks to their forecasts for economic growth or inflation as tilted to the downside, and a couple saw the risks to their forecasts for inflation as tilted to the upside.

The Outlook for Economic Activity

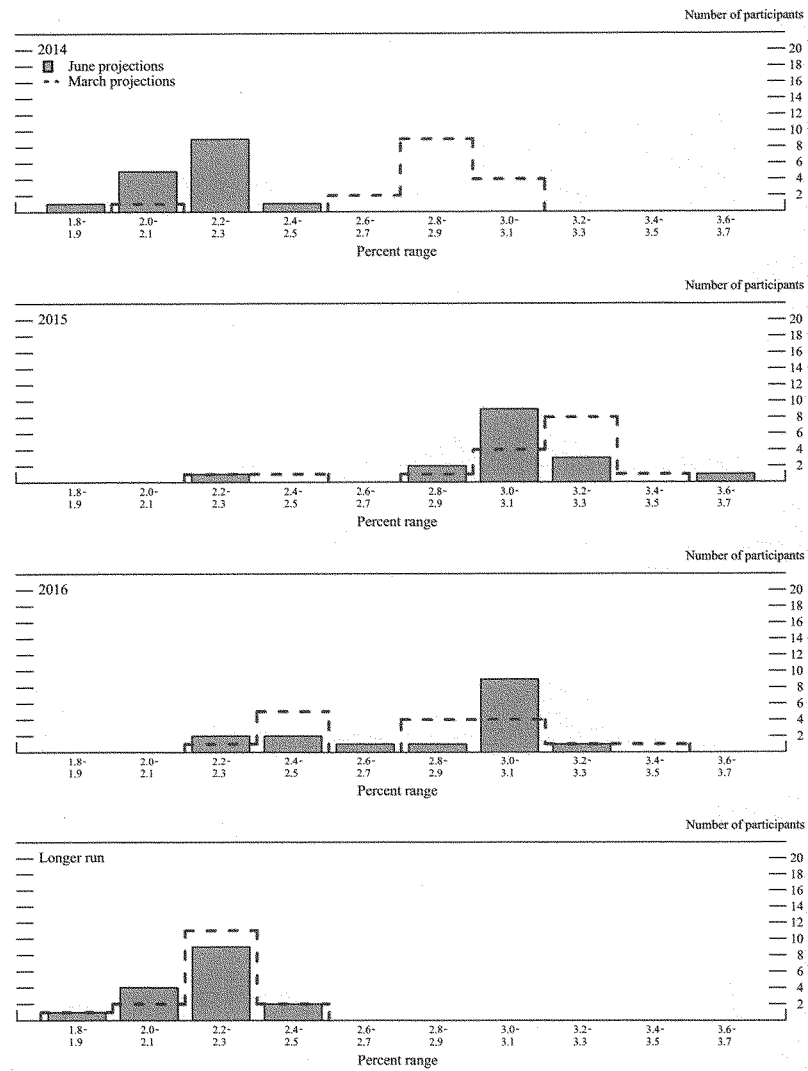
Participants generally projected that, conditional on their individual assumptions about appropriate monetary policy, real GDP growth would pick up notably in the second half of this year and remain in 2015 and 2016 above their estimates of the longer-run normal rate of output growth. All participants revised down their projections of real GDP growth for the first half of 2014 compared with their projections in March, but most left their forecasts for the remainder of the projection period largely unchanged. Participants generally judged that real GDP growth in the first half of this year was held down by transitory factors depressing output early in the year, and they pointed to a number of factors that they expected would continue to contribute to a pickup in economic growth

later this year and next, including rising household net worth, diminished restraint from fiscal policy, improving labor market conditions, and highly accommodative monetary policy. The central tendencies of participants' projections for real GDP growth were 2.1 to 2.3 percent in 2014, 3.0 to 3.2 percent in 2015, and 2.5 to 3.0 percent in 2016. The central tendency for the longer-run normal rate of growth of real GDP was 2.1 to 2.3 percent, only slightly lower than in March.

Participants continued to anticipate a gradual decline in the unemployment rate over the projection period. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 6.0 to 6.1 percent in 2014, 5.4 to 5.7 percent in 2015, and 5.1 to 5.5 percent in 2016. Nearly all participants revised down their projected paths for the unemployment rate this year and next relative to their March projections, with the majority pointing to the decline in the unemployment rate in recent months as a reason for the downward revision. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail under appropriate monetary policy and in the absence of further shocks to the economy also edged down, to 5.2 to 5.5 percent. Most participants projected that the unemployment rate would be close to their individual estimates of its longer-run level at the end of 2016.

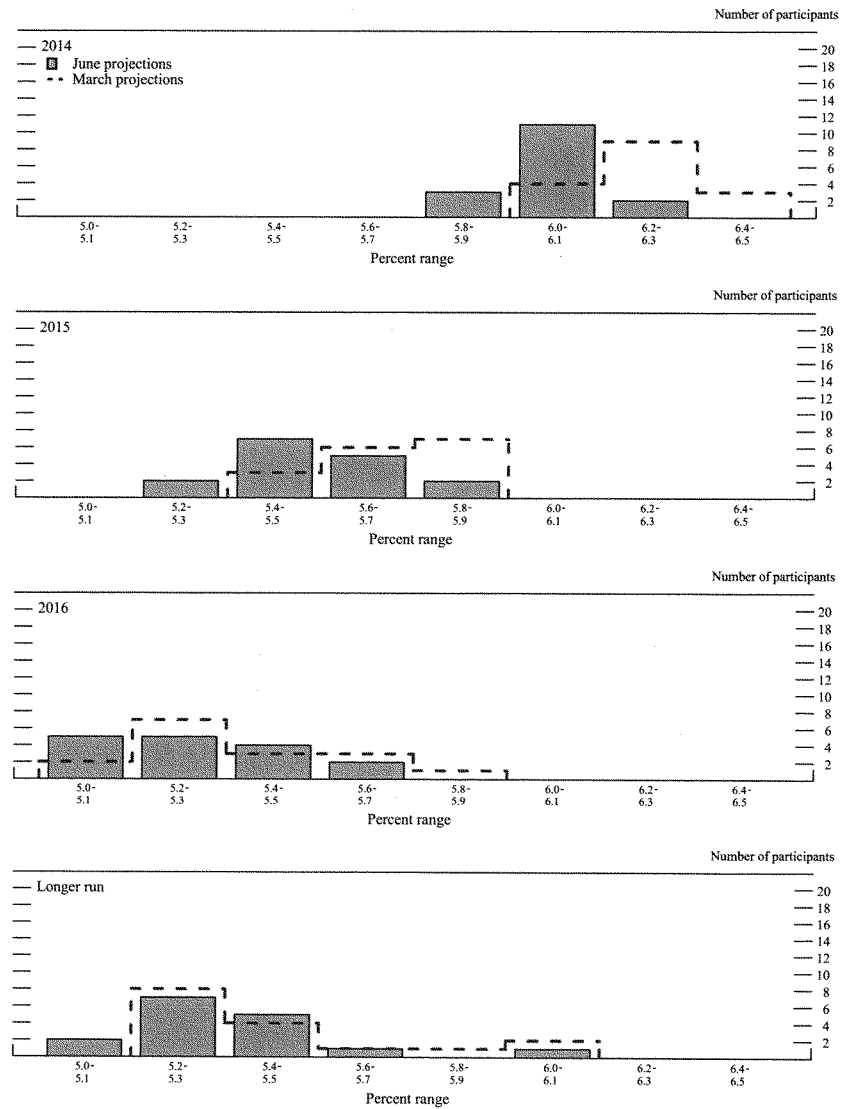
Figures 3.A and 3.B show that participants continued to hold a range of views regarding the likely outcomes for real GDP growth and the unemployment rate over the next two years. The diversity of views reflected their individual assessments of the rate at which the headwinds that have been holding back the pace of the economic recovery would abate and of the anticipated path for foreign economic activity, the trajectory for growth in household net worth, and the appropriate path of monetary policy. Relative to March, the dispersion of participants' projections for real GDP growth narrowed a bit in 2014

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–16 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2014–16 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

but was largely unchanged over the next two years, and the dispersion of projections for the unemployment rate over the entire projection period was little changed.

The Outlook for Inflation

Compared with March, the central tendencies of participants' projections for inflation were largely unchanged for all years in the projection period, although many participants marked up a bit their projections for inflation in 2014. The vast majority of participants anticipated that, on average, both headline and core inflation would rise gradually over the next few years, and the majority of participants expected headline inflation to be at or slightly below the Committee's 2 percent objective in 2016. Specifically, the central tendencies for PCE inflation were 1.5 to 1.7 percent in 2014, 1.5 to 2.0 percent in 2015, and 1.6 to 2.0 percent in 2016. The central tendencies of the forecasts for core inflation were broadly similar to those for the headline measure. It was noted that some combination of stable inflation expectations and steadily diminishing resource slack was likely to contribute to a gradual rise of inflation back toward the Committee's longer-run objective of 2 percent.

Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. The ranges of participants' projections for overall inflation were little changed relative to March. The forecasts for PCE inflation in 2016 were at or below the Committee's longer-run objective. Similar to the projections for headline inflation, the projections for core inflation in 2016 were concentrated at or below 2 percent.

Appropriate Monetary Policy

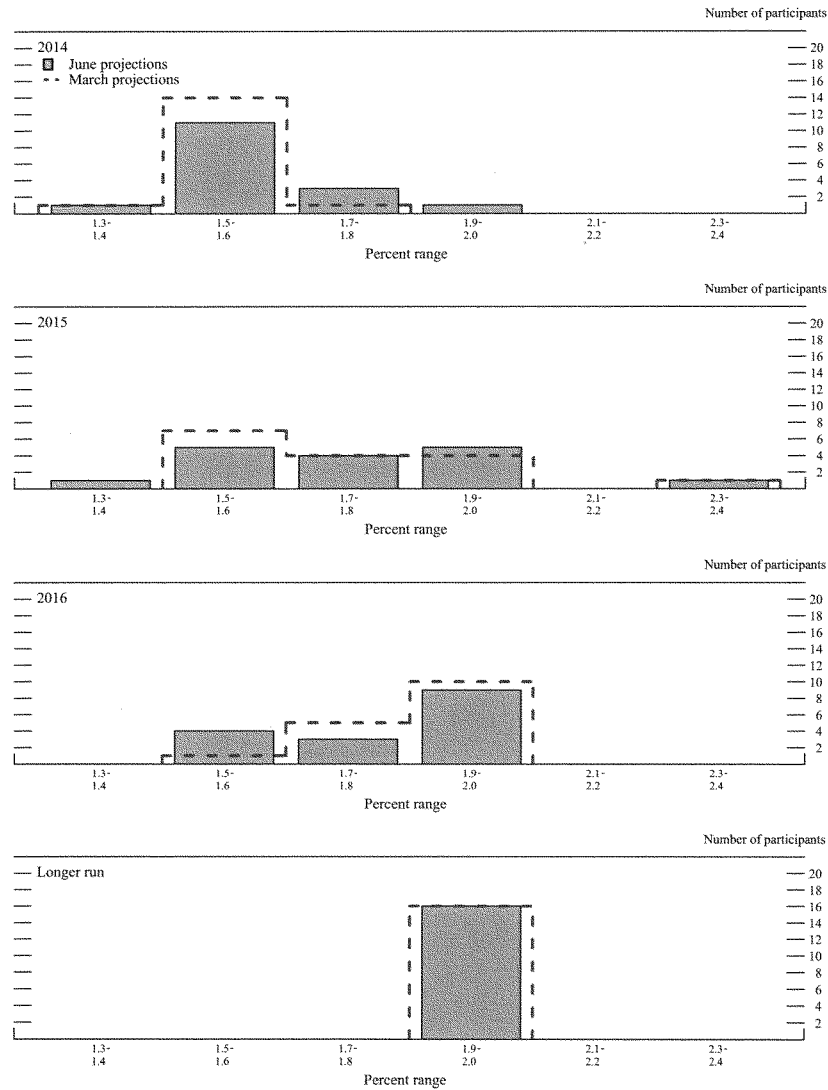
As indicated in figure 2, nearly all participants judged that low levels of the federal funds rate would remain appropriate for the next few years. In particular, 12 participants thought that the first increase in the target federal funds

rate would not be warranted until sometime in 2015, and 3 judged that policy firming would likely not be appropriate until 2016. Only 1 participant thought that an increase in the federal funds rate would be warranted in 2014.

All participants projected that the unemployment rate would be below 6 percent at the end of the year in which they judged the initial increase in the federal funds rate to be warranted, and all but one anticipated that inflation would be at or below the Committee's longer-run objective at that time. Most participants projected that the unemployment rate would remain above their estimates of its longer-run normal level at the end of the year in which they saw the federal funds rate increasing from its effective lower bound.

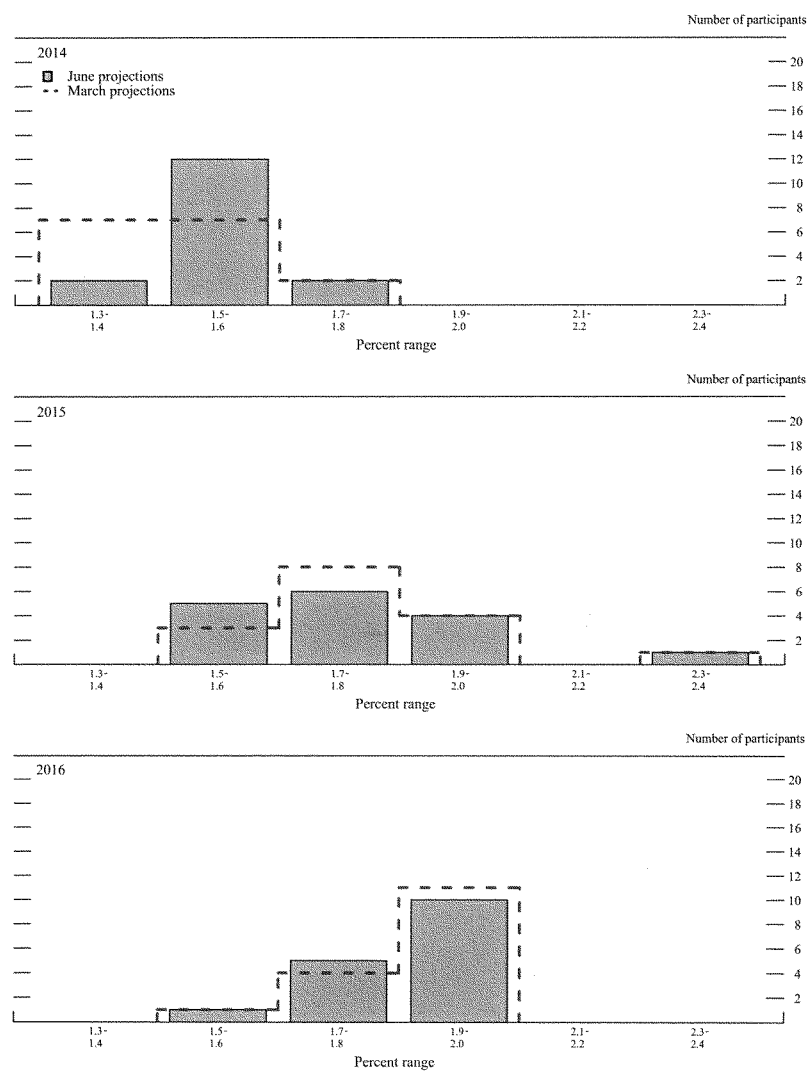
Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2014 to 2016 and over the longer run. As noted earlier, nearly all participants judged that economic conditions would warrant maintaining the current exceptionally low level of the federal funds rate at least until 2015. Relative to their projections in March, the median values of the federal funds rate at the end of 2015 and 2016 increased 13 basis points and 25 basis points to 1.13 percent and 2.50 percent, respectively, while the mean values rose 7 basis points and 11 basis points to 1.18 percent and 2.53 percent, respectively. The dispersion of projections for the value of the federal funds rate was little changed in 2015 but widened slightly in 2016. Most participants expected that the federal funds rate at the end of 2016 would still be significantly below their individual assessments of its longer-run level. For about half of these participants, the low level of the federal funds rate at that time was associated with inflation well below the Committee's 2 percent objective. In contrast, the rest of these participants saw the federal funds rate at the end of 2016 as still significantly low despite their projections that the unemployment rate would be close

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014–16 and over the longer run



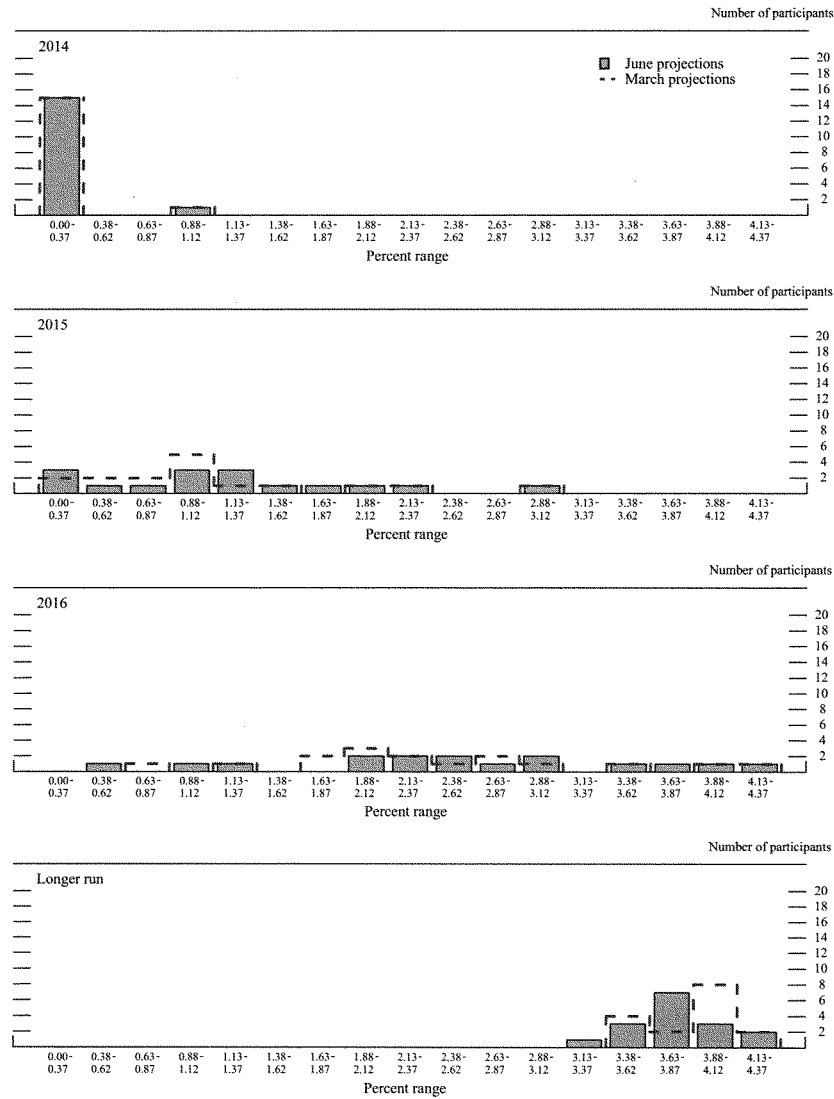
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2014–16



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2014–16 and over the longer run



NOTE: The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

to or below their individual longer-run projections and inflation would be at or close to 2 percent at that time. These participants cited some combination of a lower equilibrium real interest rate, continuing headwinds from the financial crisis and subsequent recession, and a desire to raise the federal funds rate at a gradual pace after liftoff as explanations for the still-low level of the projected federal funds rate at the end of 2016. A couple of participants also mentioned broader measures of labor market slack that may take longer to return to their normal levels than the unemployment rate. Estimates of the longer-run level of the federal funds rate ranged from 3¼ to about 4¼ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments regarding the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy. Compared with March, some participants revised down their estimates of the longer-run federal funds rate, with a lower assessment of the longer-run level of potential output growth cited as a contributing factor for the majority of those revisions. As a result, the median estimate of the longer-run federal funds rate shifted down to 3.75 percent from 4 percent in March, while its mean value declined 11 basis points to 3.78 percent.

Participants also described their views regarding the appropriate path of the Federal Reserve's balance sheet. Conditional on their respective economic outlooks, most participants judged that it would be appropriate to continue to reduce the pace of the Committee's purchases of longer-term securities in measured steps and to conclude the purchases later this year. A couple of participants judged that a more rapid reduction in the pace of purchases and an earlier end to the asset purchase program would be appropriate.

Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including the values of the unemployment rate

and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment, the prospects for inflation to return to the Committee's longer-term objective of 2 percent, and the balance of risks around the outlook. Many participants also mentioned the prescriptions of various monetary policy rules as factors they considered in judging the appropriate path for the federal funds rate.

Table 2. Average historical projection error ranges
Percentage points

Variable	2014	2015	2016
Change in real GDP ¹	±1.4	±2.0	±2.1
Unemployment rate ¹	±0.4	±1.2	±1.8
Total consumer prices ²	±0.8	±1.0	±1.0

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1994 through 2013 that were released in the spring by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. For more information, see David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November), available at <http://www.federalreserve.gov/pubs/feds/2007/200760/200760abs.html>; and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), "Updated Historical Forecast Errors," memorandum, April 9, <http://www.federalreserve.gov/foia/foiafiles/20140409-historical-forecast-errors.pdf>.

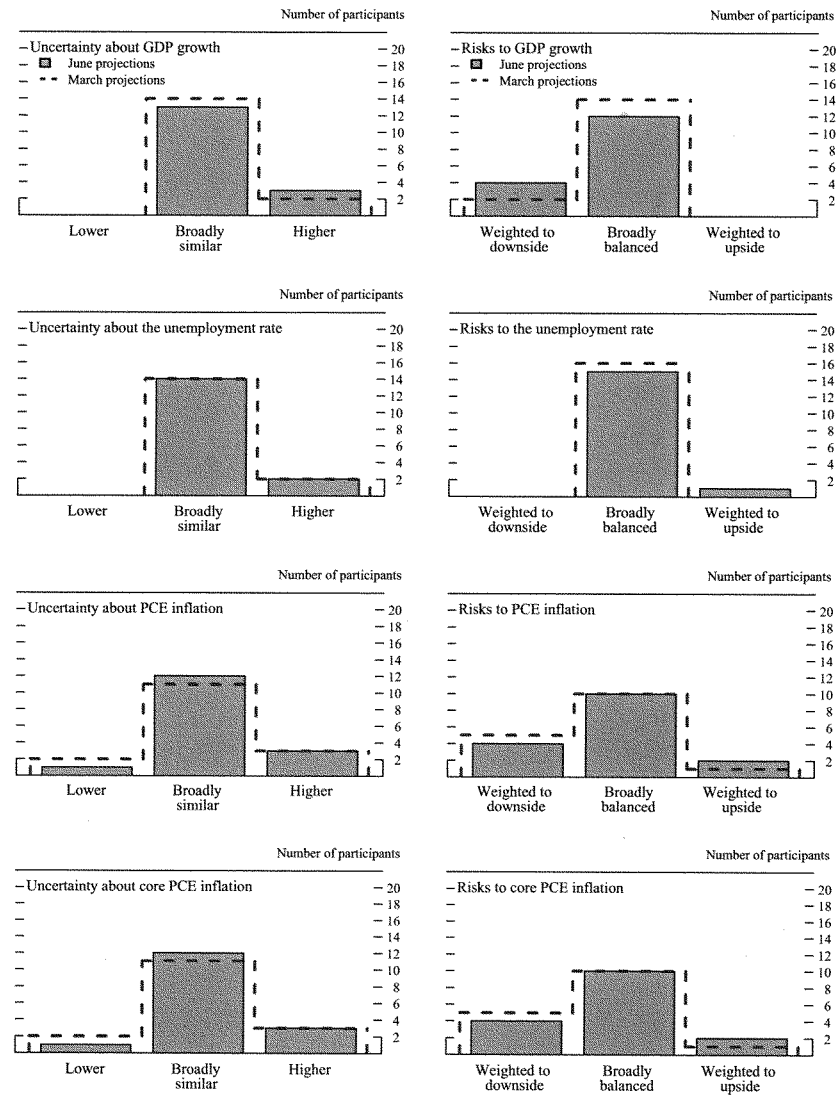
1. Definitions of variables are in the general note to table 1.
2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

Uncertainty and Risks

The vast majority of participants continued to judge the levels of uncertainty about their projections for real GDP growth and the unemployment rate as broadly similar to the norms during the previous 20 years (figure 4).¹⁹

19. Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1994 through 2013. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Figure 4. Uncertainty and risks in economic projections



NOTE: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1.

Most participants continued to judge the risks to real GDP growth and the unemployment rate to be broadly balanced, although a few participants viewed the risks as weighted to the downside, reflecting, for example, their concerns about the limited ability of monetary policy at the zero lower bound to respond to negative shocks to the economy as well as external economic and geopolitical risks. Similar to March, nearly all participants continued to judge the risks to the unemployment rate to be broadly balanced.

Almost all participants saw the level of uncertainty and the balance of risks around their forecasts for overall PCE inflation and core inflation as little changed from March.

Most participants continued to judge the levels of uncertainty associated with their forecasts for the two inflation measures to be broadly similar to historical norms, and a majority continued to see the risks to those projections as broadly balanced. A few participants, however, viewed the risks to their inflation forecasts as tilted to the downside, reflecting, for example, the possibilities that the recent low levels of inflation could prove more persistent than anticipated, and that the upward pull on prices from inflation expectations might be weaker than assumed. Conversely, two participants saw upside risks to inflation, with one citing uncertainty about the timing and efficacy of the Committee's withdrawal of accommodation.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 1.6 to 4.4 percent in the current year, 1.0 to 5.0 percent

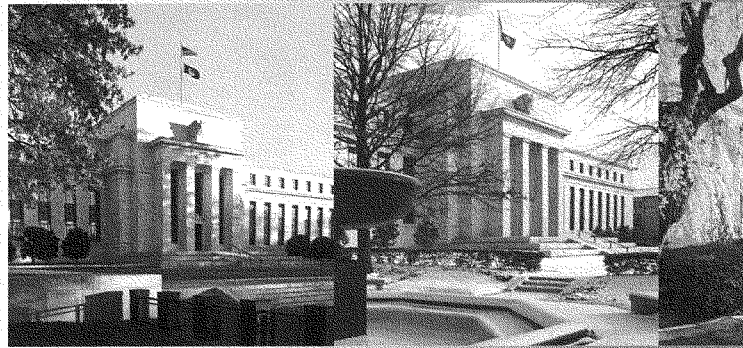
in the second year, and 0.9 to 5.1 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.2 to 2.8 percent in the current year and 1.0 to 3.0 percent in the second and third years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

ABBREVIATIONS

AFE	advanced foreign economy
BHC	bank holding company
CDS	credit default swaps
C&I	commercial and industrial
CRE	commercial real estate
ECB	European Central Bank
E&I	equipment and intangible
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
IOER	interest on excess reserves
LIBOR	London interbank offered rate
MBS	mortgage-backed securities
ON RRP	overnight reverse repurchase agreement
PCE	personal consumption expenditures
REIT	real estate investment trust
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
S&P	Standard & Poor's
TDF	Term Deposit Facility



Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative McHenry:

1. Chair Yellen, please describe the processes and lines of authority with respect to CCAR, including the roles of supervisory teams at the Bank-level, the Bank Presidents, senior Board staff within Banking Supervision and Regulation, and the Board of Governors. Please provide detail for the process of reviewing annual submissions, identifying how submissions are “graded” throughout the review process, and the relative weight each of the participants holds. In addition to outlining the process for reviewing and approving submissions, please also outline the Federal Reserve’s decision-making process relative to CCAR policy. As you do, comment on the relative roles of each of the participants outlined above. Please utilize a broad definition of policy, not just published guidance or rules.

Capital plans are reviewed annually through the Federal Reserve’s Comprehensive Capital Analysis and Review (CCAR). CCAR is conducted pursuant to the Federal Reserve Board’s Capital Plan Rule (12 CFR 225.8). CCAR has two-main components: 1) a quantitative analysis, for which Federal Reserve stress test models are used to project financial performance and assess post-stress capital levels against pre-determined regulatory minimums, and 2) a qualitative assessment of the sufficiency of the banking holding companies’ (BHC) internal capital management processes to identify, measure, and relate their risk positions to both internally-developed and regulatory-specified capital adequacy metrics.

With regard to the quantitative analysis, firms must demonstrate their ability to maintain a capital level above regulatory minimums under baseline and stress scenarios. The Federal Reserve may object to a capital plan of any firm with a post stress capital level that is below any regulatory capital minimum at any point in the nine quarter stress horizon.

With regard to the qualitative assessment, the Federal Reserve conducts a comprehensive evaluation of a BHC’s risk management processes, stress testing analytics, internal controls and governance supporting capital adequacy analysis and capital planning. This evaluation is overseen by a committee of senior bank supervisors, drawn both from district Reserve Banks with delegated authority for the oversight of BHCs included in the CCAR program, as well as the Board of Governors. Responsibilities of this committee include ensuring adequate staffing for the assessment work, ensuring consistency in application of supervisory expectations in the assessments of the individual BHCs, and making recommendations to the Director of Banking Supervision (Director) at the Federal Reserve Board on the results of the analysis.

The Federal Reserve has issued supervisory expectations and range of practice guidelines which, in combination with the requirements set forth in the Capital Plan Rule and Dodd-Frank Act Stress Testing Rule, form the benchmarks against which firms are assessed in the CCAR qualitative review. Collectively these requirements, expectations, and guidelines cover issues related to the analytical capacity that firms subject to CCAR must develop to support effective enterprise stress testing, as well as more traditional risk management and governance practices firms are expected to maintain with respect to capital planning. Examination work conducted throughout the course of the year as well as the review of each firm’s capital plan, provide the basis for recommendations to object or not object to the capital plan.

Recommendations to the Director are thoroughly vetted at multiple levels of Federal Reserve System, including the CCAR oversight committee and Federal Reserve System-wide management groups responsible for the supervision of firms subject to CCAR. The Director is responsible for making recommendations on capital plan submissions to the Board of Governors. Final decisions on all capital plan submissions are subject to vote by the Board of Governors of the Federal Reserve System.

We appreciate the opportunity to respond to your question and would be pleased to provide additional information and transparency around major elements of the CCAR program.

Questions for The Honorable Janet Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Neugebauer:

1. Chair Yellen, the Bank of International Settlements, which is an international organization of central banks stated in its most recent annual report that: “The benefits of unusually easy monetary policies may appear quite tangible, especially if judged by the response of financial markets [in the shorter term]; the costs, unfortunately, will become apparent only over time and with hindsight.”

Essentially, what BIS is saying is that the Fed’s policy timeframe remains too short and that the Fed continues to pay too little attention to the longer-lived financial market cycle. BIS argues that this could give rise to costly asset price booms and busts similar to what we saw in 2008 - 2009. Chair Yellen, how do you respond to this assessment?

As described in the Federal Open Market Committee’s (FOMC) statement on “Longer-Run Goals and Policy Strategy,” the FOMC conducts monetary policy so as to achieve its Congressionally established objectives of stable prices and maximum employment, taking a balanced approach to achieving both objectives over time.¹ In the statement released after the July meeting, the FOMC indicates that it “...currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the FOMC views as normal in the longer run.”² The FOMC added this language to its post-meeting statement after the March meeting. The minutes of the March meeting note that meeting participants cited several reasons for their expectation that a lower-than-normal federal funds rate may be necessary to achieve its dual mandate over time: “...higher precautionary savings by U.S. households following the financial crisis, higher global levels of savings, demographic changes, slower growth in potential output, and continued restraint on the availability of credit.”³

While several of these reasons are the consequence of the financial crisis, the FOMC’s expectation that the federal funds rate may need to be lower than normal for some time after inflation and employment return to mandate-consistent levels is not indicative of a bias toward easier policy over time. When asset price booms or excessively easy credit have in the past contributed to aggregate demand that was, or threatened to be, above levels consistent with achieving the dual mandate, the FOMC has tightened monetary policy in response. Indeed, if the FOMC were to conduct policy with a bias toward accommodation, then over time inflation would rise. Instead, inflation has fluctuated in a range around 2 percent--the FOMC’s objective--for the past several decades.

¹ The FOMC’s statement on its longer run goals and policy strategy is renewed annually. The current version is available at http://www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals.pdf.

² <http://www.federalreserve.gov/newsevents/press/monetary/20140730a.htm>.

³ <http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20140319.pdf>.

2. Along those lines, when we look at the high yield bond market, credit spreads have narrowed to very low levels as investors have been searching for higher yield. But interestingly, volatility has sagged to historic lows – which means that market participants are hardly pricing in any risk. Chair Yellen, isn't this a text book asset bubble or at least the recipe for a potential disaster?

The spread of corporate bond yields to those of Treasury securities of comparable maturity have generally trended down over the past few years, reaching levels toward the lower end of their historical distribution over the past two decades. Broad measures of financial market volatility have followed a similar pattern. However, both corporate bond spreads and financial market volatility have moved up in recent weeks.

Generally, low corporate bond spread and financial market volatility likely reflect, in part, strong balance sheets for nonfinancial corporations and the sharp recovery seen in corporate profits since the financial crisis. In the past, however, similar financial market conditions have sometimes been associated with elevated risk taking, which could lead to financial imbalances. The Federal Reserve will continue to monitor financial markets to identify potential threats to financial stability. While we do see pockets of increased risk taking across the financial system, this does not appear to be a widespread phenomenon at this time. Moreover, the Federal Reserve has taken important steps to boost the resilience of the financial system so that it is better positioned to absorb losses if there were a sudden and large change in asset prices.

3. I know you have gone out of your way to emphasize that any exit from the Fed's extraordinary measures to stimulate economic activity will be gradual as well as delayed, but given the conditions in the corporate debt and high yield markets shouldn't you also pay special attention to the risks of exiting too late and too gradually?

In current circumstances, low interest rates are important for promoting a strong economy, including progress toward the Federal Reserve's goals of maximum employment and stable prices. However, the Federal Reserve is also mindful that a prolonged period of low rates could encourage imprudent risk taking by some investors and eventually undermine financial stability. For this reason, the Federal Reserve, on its own and with other domestic and international regulators, has increased its efforts to comprehensively monitor the financial system to identify emerging systemic risks and to guide actions to mitigate those risks. While we do see pockets of increased risk taking across the financial system, this does not appear to be a widespread phenomenon at this time.

The Federal Reserve has taken important steps to boost the resilience of the financial system, so that it is better positioned to absorb losses if there were a sudden and large change in asset prices. In this regard, the Federal Reserve is strengthening capital and liquidity requirements for the largest financial institutions, conducting annual capital stress tests, working to implement margins for un-cleared derivatives, and evaluating

ways to address risks in short-term funding markets. In addition, the Federal Reserve is engaged in supervisory work on interest rate risk at the largest banking firms, and the federal banking agencies issued supervisory guidance on leveraged loans last year.

Monetary policy is a blunt tool with which to address financial stability risks. The tighter financial conditions that might dampen financial excesses on the part of a few would be borne by everyone in the economy, including businesses and households who rely on financial markets in the ordinary course of business or everyday life. At the same time, regulatory tools may not always be as effective as we would like. Thus, it is important that we monitor the degree to which the steps we have taken build sufficient resilience and that we consider the deployment of other tools to ameliorate emerging risks to financial stability when necessary. In some cases, it may also be appropriate to adjust the stance on monetary policy in order to address such risks.

4. There have been a series of articles recently about anxiety in the bond and Treasury market given increasing amounts of uncompleted trades in the face of less market liquidity. The articles mention that part of the reason this is happening was lower bank trading inventory following the wave of new regulations. Two particular regulations—the net stable funding ratio and the supplementary leverage ratio—seem to be discouraging banks from taking part in repos, by making it more expensive for them to own short-term debt. Past spikes in the fail rate have been associated with periods of market nervousness. But interestingly, this time the markets are fairly calm. Do you find it surprising or concerning that there are signs of market stress in this period of relative stability? If markets are showing signs of stress in this period of relative calm, what does the Federal Reserve expect to happen once rates start to rise or when we actually experience more significant stress in the markets? Will the traditional market makers be able to intermediate during the next major market event? Additionally, as these articles point out, it appears that the binding nature of the Fed’s leverage ratio is causing banks to pull back from these important markets. Can you please comment on whether this is the intended effect of the Fed’s leverage policy and incentives being given to banks?

The Federal Reserve is mindful of the importance of well-functioning secondary markets for corporate bonds and Treasury securities and is monitoring developments in those markets closely. We remain in contact with market participants in order to understand how those markets are functioning and whether regulations are affecting those markets.

Treasury “settlement fails” rose modestly for a time in June as dealers contracted their balance sheets ahead of quarter end, but “fails-to-deliver” have since returned to normal levels and other indicators of Treasury market liquidity have remained within normal ranges. In the case of corporate bond markets, we have not witnessed any spike in fails recently, and liquidity in those markets appears to be generally robust, although there has been some evidence of less liquidity in the secondary market for speculative grade corporate bonds. It is true that broker-dealer holdings of corporate and foreign bonds declined during the crisis and have remained at low levels relative to the pre-crisis period.

However, this has not resulted in a significant effect on the overall liquidity in the secondary market for corporate bonds.

Any effects of new regulations, such as the net stable funding ratio and the supplementary leverage ratio, on the corporate or Treasury bond markets needs to be assessed against the benefits of those regulations. In particular, these regulations are designed to make the financial system better capitalized and more resilient during periods of financial stress. While financial market participants have suggested that new regulations may dampen the frequent trading of securities on secondary markets, these regulations are designed to strengthen the financial system overall and to guard against disruptions in the flow of credit to businesses and households.

5. Chair Yellen: As you know, two Senators at yesterday's hearing expressed serious concern about the issue of the FSB and IAIS developing a European style capital standard on U.S. insurers that haven't been designated as being systemically important, but are simply internationally active. I noted that your responses placed heavy reliance on the notion that that any standards developed will not have any legal effect in the United States unless they are implemented by U.S. regulators in accordance with U.S. law.

First, at a minimum aren't these de-facto regulatory standards given that our global counterparts can deny market access if they are not followed. Why would you be supporting these efforts?

Second, aren't we negotiating in bad faith if there is no guarantee that these standards will be adopted?

A goal of the international capital standard being developed by the International Association of Insurance Supervisors (IAIS) is to achieve greater comparability of the capital requirements of internationally active insurance groups (IAIGs) across jurisdictions at the group-wide level. This should promote financial stability, provide a more level playing field for firms, and enhance supervisory cooperation and coordination by increasing the understanding among group-wide and host supervisors. The capital standards should also lead to greater confidence being placed on the group-wide supervisory analysis. These standards under development by the IAIS are not contemplated to replace existing insurance risk-based capital standards at U.S. domiciled insurance legal entities. The IAIS capital standards would supplement existing legal entity risk-based capital requirements by evaluating the financial activities of the firm overall rather than on an individual basis. It is important to note that the IAIS does not have the ability to implement requirements in any jurisdiction. Implementation in the United States would require regulatory action, would have to be consistent with U.S. law, and would have to comply with the administrative rulemaking process.

The work of the IAIS includes both field testing of certain insurance companies and quantitative impact studies. The data collected on both a macro and individual firm level will assist the IAIS in assessing the impact of the proposals.

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Luetkemeyer:

1. The Financial Stability Oversight Council was created, in theory, to enhance coordination between financial regulators. International insurance regulation already has such a process - called supervisory colleges - that bring international insurance regulators together to talk about the companies they regulate and identify potential risks. Why has FSOC chosen to focus on capital when capital inadequacy is not and was not a problem for insurers in the United States during the financial crisis?

As you point out, supervisory colleges do indeed contribute to the deliberations and coordination of cross-jurisdictional regulators. The Federal Reserve has, and will continue to participate in supervisory colleges for insurers which it supervises. The Financial Stability Oversight Council (FSOC) has a different mandate and membership than is typical for supervisory colleges. The FSOC was created under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) to identify risks and respond to emerging threats to financial stability. The FSOC's membership is extremely broad, comprising 15 voting and nonvoting members, including three representatives with specific insurance expertise (one voting and two non-voting). It is important to note that the FSOC's powers--as opposed to those of agencies represented on the FSOC--are highly limited. The FSOC itself does not develop or prescribe capital requirements for any entity, nor does it participate in policy making of capital rules on a domestic or international basis. Regarding the development of capital standards on insurance companies and other institutions, please see the answers to your other questions below.

2. In your June 4, 2014, responses to my questions for the record you noted that the Basel Committee has been promulgating capital requirements for internationally active banks for decades. In recent years, smaller domestic and community banks in the United States have seen their capital requirements rise to these higher standards and have struggled to keep up with the burden. Do you see a similar fate for our domestic insurers eventually having to comply with higher capital standards because of the international capital standards coming from the IAIS?

A goal of the international capital standard (ICS) being developed by the International Association of Insurance Supervisors (IAIS) is to achieve greater comparability of the capital requirements of internationally active insurance groups (IAIGs) across jurisdictions at the group-wide level. This should promote financial stability, provide a more level playing field for firms and enhance supervisory cooperation and coordination by increasing the understanding among group-wide and host supervisors. It should also lead to greater confidence being placed on the group-wide supervisory analysis. The standards under development by the IAIS are not contemplated to replace existing insurance risk-based capital standards at U.S. domiciled insurance legal entities. Any IAIS capital standard would supplement existing legal entity risk-based capital requirements by evaluating the financial activities of the firm overall rather than by evaluation individual legal entities. It is important to note that neither the Financial Stability Board, nor the IAIS, has the ability to implement requirements in any

jurisdiction. Implementation in the United States would have to be consistent with U.S. law and comply with the administrative rulemaking process. Furthermore, implications to U.S. insurers not within the authority of the Federal Reserve would depend on whether the states individually adopt the standards of the IAIS.

3. Members of Congress have been told that we should not worry about what is being negotiated at the IAIS because nothing can go into effect in the United States unless implemented by the state or federal regulators or Congress. Does that point ignore the risk that our U.S.-domiciled insurers could be put at a competitive disadvantage in other countries in which they operate if the United States negotiates a standard it can never fully implement? What would be the result for our multinational insurers abroad?

As we have noted above, the current IAIS standard setting does serve regulatory utility for IAIGs, which points to the necessity for regulators from across the globe to collaborate while recognizing and respecting the authority of each jurisdiction, and the implications to market participation and competition.

4. The United States is the only market I know of that has mortgage servicing assets. Yet, as I understand it, it was the Basel committee, an international body, which first developed the new MSA capital standards. Can you tell me how it came to be that U.S. regulators allowed an international regulatory body to create the rules around a product that is only found in the United States?

As an active member of the Basel Committee on Banking Supervision (BCBS), the Federal Reserve, along with the other U.S. banking agencies, works cooperatively with the international community to develop international regulatory capital standards, such as the Basel III framework. The preamble to the revised regulatory capital rule, which incorporates Basel III, notes that the agencies have long excluded mortgage servicing assets (MSAs) and other intangible assets from regulatory capital either fully or partially, due to the high level of uncertainty regarding the ability of banking organizations to realize value from these assets. In addition, the liquidity (in the form of sales, exchanges or transfers) of MSAs tends to dry up during times of crisis. Furthermore, during the liquidation of a failed institution's assets, MSAs, in many cases, have proven to be unmarketable. Accordingly, the requirements in the revised capital rule reflect the agencies' observations and concerns about the uncertainty regarding MSAs' ability to retain value under adverse financial conditions, which is when banking organizations especially need high levels of loss absorbency.

5. How closely did you, the Federal Reserve staff, and other federal banking regulators study mortgage servicing assets before agreeing to the Basel III-imposed capital standards?

The agencies designed the revised capital rule to increase the resiliency of the overall banking sector by strengthening the quantity and quality of capital held by all banking organizations. Before taking this action, the agencies carefully considered comments

received on the proposal, including comments on the proposed treatment of MSAs. In addition, prior to issuing the revised capital rule, the agencies conducted a pro-forma impact analysis of the proposed requirements on banking organizations that at that time met the minimum regulatory capital requirements, based on each agency's key assumptions using regulatory reporting data. That analysis indicated that the revised capital rule would not require most small and mid-sized banking organizations (those with less than \$10 billion in total assets) to raise additional capital to meet the minimum common equity tier 1 capital ratio plus the capital conservation buffer. Moreover, for the few small and mid-sized banking organizations whose holdings of MSAs exceed the revised capital rule's limits, the lengthy transition period for regulatory capital deductions incorporated in the revised capital rule should allow these organizations sufficient time to modify their capital structure or adjust their business models as appropriate.

6. Chair Yellen, in your responses to the questions that followed your February 11th testimony before this Committee you state, when discussing the proper way to assess systemic importance, "it is for this reason that [Dodd-Frank] requires FSOC to consider 10 statutory factors when assessing whether a nonbank financial company should be designated as systemically important." Shouldn't review of bank holding companies be subject to a wide array of criteria?

In sections 165 and 166 of the Dodd-Frank Act, Congress subjected all bank holding companies with assets of greater than \$50 billion to enhanced prudential standards. Congress also mandated in the Dodd-Frank Act that the Federal Reserve gradate the enhanced prudential standards based on the systemic footprint of the bank holding company, as measured by a wide variety of factors, including a firm's size, leverage, interconnectedness, and use of short-term funding.

Consistent with that statutory mandate, we have tailored many of our enhanced prudential standards to be most stringent for the largest, most globally active, and most systemic U.S. banking firms and least stringent for the less systemic firms that are only modestly above \$50 billion in assets. Examples of the Federal Reserve's regulatory tailoring for the largest and most systemic banking firms include stress testing requirements, the liquidity coverage ratio, the advanced approaches risk-based capital requirements, the countercyclical capital buffer, the supplementary leverage ratio, and the enhanced supplementary leverage ratio. We have also indicated that we intend to propose risk-based capital surcharges for our most systemic banking firms based on the multi-factor systemic footprint measurement framework adopted by the BCBS.

In addition, the Federal Reserve is committed to tailoring its supervisory program to the risk profile and systemic footprint of individual firms.

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Ross:

1. During the hearing you stated that the Federal Reserve Board is consulting with state commissioners and FIO. What specifically is the framework for this consultation? Is it regular and if so, when does it occur? Does it include state legislators? Is there public notice and opportunity for input by interested parties?

The Federal Reserve has active and ongoing relationships with state insurance commissioners directly and indirectly through the National Association of Insurance Commissioners (NAIC), and with the Federal Insurance Office (FIO). This collaborative tri-party relationship forms a U.S. policy-working group on regulatory matters related to the business of insurance. The communication is regular and both formal and informal. For example, staff of the Federal Reserve attended the NAIC's annual summer meeting in Louisville and fall meeting in Washington, while also participating in a number of public forums on topics including international capital standards and financial stability. State legislators also participated in the meetings and discussions. Likewise, interested parties were represented and heard at these particular meetings.

2. What procedures exist to permit interested parties to have input before Federal Reserve Board representatives go to any international meetings and before policies are formulated that will be advocated by the Federal Reserve Board representatives on insurance issues in any international body including the International Association of Insurance Supervisors and the Financial Stability Board?

The Federal Reserve, as the consolidated supervisor of bank holding companies and savings and loan holding companies, is a long-standing member of the Basel Committee on Banking Supervision (BCBS). The Federal Reserve is now also the consolidated supervisor of certain insurance companies designated by the Financial Stability Oversight Council (FSOC) for supervision by the Federal Reserve. FSOC-designated insurance companies are substantially engaged in international insurance activities. The Federal Reserve therefore joined the International Association of Insurance Supervisors (IAIS) in November 2013. As the consolidated supervisor of large, complex internationally active firms, the Federal Reserve has an interest in participating in the development of international supervisory standards and guidance. The IAIS is primarily an advisory body that has no independent legal authority.

The Federal Reserve's participation focuses on those aspects most relevant to the supervision of FSOC-designated insurance companies and other supervised entities. Other U.S. members of IAIS include the FIO, the NAIC, and state insurance regulators. The Federal Reserve works with the other U.S. members in the development of policy measures for internationally active insurance groups. In addition, the Federal Reserve works collaboratively with FIO, NAIC, and state insurance regulators in research and analysis work related to financial stability topics.

The Federal Reserve receives formal and informal input from interested parties on matters being considered by the IAIS and Financial Stability Board (FSB). As an

example of formal feedback, the Federal Reserve, FIO, and NAIC recently hosted a meeting of interested parties for the U.S. participants of field testing leading up to the development and release of the Basic Capital Requirements consultation draft. Federal Reserve staff also meet with interested parties, including trade associations, informally to discuss matters related to the IAIS and FSB. These informal meetings are frequent and ongoing.

3. Beyond procedural consultation in international insurance regulatory issues, does the Federal Reserve Board always advocate the policies and laws of the states with regard to (re)insurers it regulates? With regard to (re)insurers it does not regulate, does it always advocate the policies and laws of the states? If not, what authority authorizes the Federal Reserve Board representatives to advocate positions that are other than the policies and laws of the states?

As noted above in the prior response, the IAIS is an advisory group of regulators who collectively have no legal authority for creating or adopting laws impacting insurers in any jurisdiction. Regulation of reinsurance is conducted by the states. The Federal Reserve's focus is on safety and soundness and U.S. financial stability. The Federal Reserve would follow its established rulemaking protocols before adopting any regulation affecting supervised entities. The states would similarly need to individually codify what, if any, standards they would like to adopt into law or regulation through their own procedures, protocols, and deliberations.

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Stutzman:

1. In your swearing-in hearing, you said “A key lesson of the 1970s is the critical importance of maintaining well-anchored inflation expectations so that a wage-price spiral like we saw back then does not break out again.” Does this imply that wages are one of the first prices to signal incipient inflation?

a. If not, what does that statement mean?

During the 1970s, we saw what appeared to be a dynamic in which price increases fed into higher wages, which in turn raised firms’ costs and led to still further price increases. An important part of that dynamic was inflation expectations that moved higher in reaction to the observed inflation, contributing to wage demands and thus the rise in wages and so feeding the wage-price spiral. Since the late 1990s, however, longer-run inflation expectations have been quite stable, and this stability likely has helped to prevent such a cycle from occurring. When we have seen increases in inflation during this more recent period, such as when global oil prices rose significantly in the mid-2000s, we have not seen a corresponding rise in longer-run inflation expectations, and the effects on inflation have proven temporary. No doubt related, it is hard to find statistical evidence of aggregate wage gains signaling changes in inflation over this period. In any event, wage increases have been quite anemic during this economic recovery, and after adjusting for inflation, real compensation has fallen short of overall productivity gains. There is room for larger wage gains that do not imply higher inflation.

2. Is the lesson of the late 1990s that if the Fed provides the marketplace with a stable dollar, investment increases will offset high capacity utilization and tight labor markets so that neither contributes to inflationary pressures?

a. If not, what is the lesson of the late 90s?

During the late 1990s, the economy enjoyed rapid economic growth and tight labor markets along with low inflation. The very strong productivity growth during those years is seen as being of central importance in explaining that favorable set of outcomes, because productivity growth implied that firms’ costs remained in check even in an environment of tight labor markets and high capacity utilization. Productivity gains during those years were likely related to an increase in the pace of innovation, which helped encourage strong business investment. Monetary policy can play a role in supporting such a favorable economic environment by promoting our mandates of maximum employment and price stability, but also recognize that, fundamentally, productivity growth depends on innovation and investment that are largely outside of the control of monetary policy.

3. Any price index, such as the CPI or PCE Deflator, can be disaggregated into basically a combination of material costs, labor costs and capital costs. Why is it that rising commodity prices are viewed as noise, or transient, but a similar increase in wages is seen as inflationary?

Any rise in firms' costs--whether stemming from higher labor costs or from capital costs or materials costs--could lead to higher prices as firms' profit margins are squeezed. But the inflationary effect of such a cost increase depends importantly on expectations for costs in the future. If a rise in the price of oil or other raw materials is expected to be reversed, firms may be able to smooth through that cost increase without raising prices. And even if a cost increase is perceived as permanent, if it is not expected to occur again, then we may only see a one-time price increase that does not feed a persistent rise in inflation. This is why the behavior of inflation expectations is so important. Similarly, wage increases are only inflationary if they lead to a sustained rise in costs, such that real wages tend to run persistently ahead of productivity.

4. Is wage growth a sign of inflation or prosperity?

When productivity is rising, then wages can rise as well without adding to firms' overall costs and boosting price pressures. As such, productivity is probably the most important factor determining the overall gains in living standards over time. So the key question is whether wages in the aggregate are rising faster than overall productivity. As prior noted, during this economic recovery, aggregate compensation has been quite anemic such that real wage gains have not kept up with productivity growth; moreover, inflation as measured by the Personal Consumption Expenditures price index has run somewhat below the Federal Open Market Committee's (FOMC) 2 percent objective on average. In this environment, there is room for higher wage gains without leading to inflation that is above our objective.

5. If wage growth is inflationary, will we ever again see the type of across-the-board prosperity for the bottom 90% like we last saw 1948-1971? If so, how?

Please see response to question 6.

6. Is there any connection between the Fed's treatment of wage growth as an inflationary pressure and stagnant income for the bottom 90% since 1971?

As discussed, productivity growth allows for gains in real wages, in the aggregate, and wage gains that match productivity growth are not inflationary. That said, not everyone has shared equally in those gains, and the widening of the income distribution in the U.S. over the past several decades is quite worrisome. While economists are by no means unanimous on the causes of that widening, some forces that are often cited include changing technologies that have benefited those with more education, and greater globalization. Moreover, reduced bargaining power for some workers may help explain stagnation of income in the bottom half of the distribution, while changing laws or norms related to compensation for some occupations (e.g., executives and financial

professionals) may have contributed to rising real income at the top. By contrast, monetary policy probably does not permanently influence the distribution of income. To promote rising living standards for all Americans, the Federal Reserve should faithfully pursue our statutory dual mandate of maximum employment and price stability.

7. Is it possible to have inflation with slack in labor markets?

Other things equal, slack in labor markets tends to hold down inflation, and high unemployment is an important part of the reason that inflation has been low on average during the past several years. But labor market slack is by no means the only determinant of inflation. Among the other important factors are costs of raw and intermediate materials, including but not limited to crude oil prices, and prices of imported goods. So, for example, inflation moved temporarily above the FOMC's 2 percent objective during 2011, following a sizable runup in prices of oil and other imports, even as there remained considerable slack in labor markets. But inflation subsequently moved back down as oil prices leveled off. As discussed above, the behavior of inflation expectations is an important determinant of inflation. As long as longer-run inflation expectations remain well anchored, then any movement in inflation away from the FOMC's 2 percent objective is likely to be temporary, and we expect inflation to approach 2 percent as the economic recovery continues and labor market slack declines further.

8. In the Fed's model, do rising unit labor costs signify incipient inflation or a pending profit squeeze?

As was noted above, wages in the aggregate can rise along with productivity growth without leading to a rise in firms' labor costs per unit of output. If wages do rise more rapidly than productivity, implying higher unit labor costs, those higher costs may result in narrower profit margins; however, beyond a certain point, we would expect firms to try to restore their profit margins by passing along their higher costs. But as also noted, in recent years compensation gains have been anemic, with real compensation rising less than labor productivity, and profitability has been high. As such, firms may at present have more of a cushion than usual to absorb rises in labor costs.

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Miller:

1. When originally implemented during the aftermath of the crisis, the Federal Reserve's stress test helped restore confidence in the American banking sector and helped the American economy in its recovery. There is no question that efforts to improve the safety and soundness of the banking system are important. But since the Federal Reserve's original implementation of its stress tests, the annual iterations have become more complex, severe and opaque so much so that banks, analysts and investors have significant difficulty in understanding the process and the results.

- **How does the Federal Reserve analyze the trade offs of the effectiveness of the stress tests and whether or not the stress tests are at a point of diminishing returns?**

The Federal Reserve Board (Board) is required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) to conduct annual stress tests of bank holding companies with \$50 billion or more in total consolidated assets and nonbank financial companies designated by the Financial Stability Oversight Council for supervision by the Board. Each year, the Federal Reserve refines the elements of both the substance and process of the annual stress tests to maintain their effectiveness. These changes have been informed not only by the Federal Reserve's supervisory experience, but also by suggestions offered by the public and supervised entities. Although the major elements of the Federal Reserve's approach have been successfully established, the Board continues to consider appropriate enhancements to the stress test. If supervisory stress testing is to give regulators, banks, and the public a dynamic view of the capital positions of large financial firms, it must itself respond to changes in the economy, the financial system, and risk-management capabilities.

In order to adjust to the dynamic, complex, and evolving nature of financial companies and markets, the stress test must be composed of adaptive tools. To make the necessary adaptation, the Federal Reserve has been open to the comments, critiques, and suggestions of those outside the regulatory community. For this reason, the Federal Reserve has moved towards greater transparency around the aims, assumptions, and methodologies of the stress tests each year. For the past several years, the Federal Reserve has published the supervisory macroeconomic scenarios and framework used in the stress tests, as well as the results for each firm that participated. For example, related to the 2014 Comprehensive Capital Analysis and Review (CCAR) exercise, the Federal Reserve published additional information on its decision to object to capital plans submitted by several firms.

With respect to the severity of the stress test, the Dodd-Frank Act requires the Federal Reserve to conduct the annual supervisory stress test under three scenarios: baseline, adverse, and severely adverse. This past year, the Federal Reserve also published the stress tests results from the adverse scenario. The severely adverse scenario is designed to reflect, at a minimum, the economic and financial conditions typical of a severe U.S. recession, such as the recession that occurred following World War II. The considerations and procedures that underlie the formulation of this scenario, as well as the baseline and adverse scenarios, are outlined in a policy statement that the Federal Reserve published in 2013, after seeking and considering public comment and input on the statement.

- **Please explain what the Federal Reserve is doing to improve its processes so that the confusion that resulted from the last stress testing exercises is diminished.**

The Federal Reserve has systems in place to ensure oversight and accountability of our models and processes and will continue to enhance those systems. The Federal Reserve's process closely follows supervisory expectations for banks' model risk management.¹ Oversight of the program and the decision-making process is clear and centralized to ensure accountability and better coordination. All model development and implementation is overseen by the Model Oversight Group, a group of senior staff from across the Federal Reserve System. The models are evaluated by a special model validation group made up of experts within the Federal Reserve who do not work on the stress tests. Finally, the Federal Reserve has a Model Validation Council made up of outside experts to provide independent views and advice.

- **Please share and explain the cost-benefit analysis the Federal Reserve conducts to ensure that banks have enough capital but that those requirements do not overly constrain banks' ability to lend or serve other client needs.**

The Board considers the costs and benefits of every rule it adopts. In capital-related rulemakings, the Board seeks to balance the need to promote financial stability while minimizing the impact on economic growth and credit availability.

The regulatory capital regime in the United States is intended to help ensure banks maintain strong capital positions that will enable them to continue lending to creditworthy households and businesses even after unforeseen losses and during severe economic downturns. In addition, the Board conducts the annual CCAR exercise to assess whether the largest bank holding companies (BHCs) operating in the United States have sufficient capital and that they have robust, forward-looking, capital-planning processes that account for their unique risks. When proposing and finalizing the rules that govern the regulatory capital regime and CCAR, the Board requested and considered public comment on the costs and burdens of the proposed rulemakings, in accordance with the Administrative Procedure Act.

The Board also regularly conducts economic analyses. The Board believes, and impact studies by the Basel Committee have confirmed, that the long-term net benefits to economic growth from the higher Basel III requirements (including the proposed surcharges for systemically important financial institutions or SIFIs) outweigh the smaller short-term impact on economic growth. This is primarily due to the very sizable and long-lasting negative macroeconomic effects of financial crises. It is important to note that the Basel III capital and liquidity rules are primarily directed at our largest and most complex financial firms, whose failure would have a significant effect on the stability of the financial system.

2. We have worked very hard in Congress to preserve existing insurance regulation in connection with the regulation of SIFIs and SLHCs. However, I am increasingly concerned that existing U.S. capital and accounting standards could be jeopardized in the long-run by

¹ See <http://www.federalreserve.gov/bankinfo/srletters/sr1107.htm>.

the insurance standards you are demanding in the international arena through the Financial Stability Oversight Council.

- **What analysis, if any, has the Board undertaken to assess the potential impact on U.S. insurers if the international capital and accounting standards you are demanding are imposed on U.S. insurers?**
- **How will you assess/have you assessed the impact on U.S. insurers before advocating for or supporting specific proposals for international capital and accounting standards?**

The International Association of Insurance Supervisors (IAIS) is the international standard setting body for insurance supervisors but has no regulatory authority in any country. The Federal Reserve, as a member of the IAIS, is participating in the development of an international capital standard (ICS) with the National Association of Insurance Commissioners (NAIC) and the Federal Insurance Office (FIO). The ICS is a global group-wide capital standard applicable to globally systemically important insurers (G-SIIs) and internationally active insurance groups (IAIGs) that will provide for a comparable approach to capital across jurisdictions. The goals of ICS are policyholder protection, increase the financial strength of firms, and promotion of financial stability. This will provide a more level playing field for firms, and enhance supervisory cooperation and coordination by increasing understanding among group-wide and host supervisors. ICS may also lead to greater confidence in group-wide supervision.

The ICS will not replace existing, legal entity, risk-based capital standards for U.S.-domiciled insurance companies. ICS is intended to supplement existing, legal entity insurance risk-based capital requirements by evaluating the financial activities of the firm overall including insurance, banking, and other financial and non-financial activities. Implementation in the United States would require regulatory action, have to be consistent with U.S. law, and comply with the administrative rulemaking process.

The work of the IAIS includes field testing of various options conducted by volunteer insurance companies. The data collected on both a macro and individual firm level will assist the IAIS in assessing the impact of proposals and is valuable in the development of a standard that is both appropriate and rigorous for U.S. firms.